



**BOEING REALTY CORPORATION  
FORMER C-6 FACILITY  
LOS ANGELES, CALIFORNIA**

**WELL DESTRUCTION REPORT**

**GROUNDWATER MONITORING WELL WCC-3D**

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**To:** Mr. Brian Mossman  
Boeing Realty Corporation  
3855 Lakewood Blvd.  
Building 1A MC D001-0097  
Long Beach, CA 90846

**From:** Haley & Aldrich, Inc.

**Date:** June 28, 2002

**Re:** Well Destruction Report, Groundwater Monitoring Well WCC-3D, Boeing Realty Corporation,  
Former C-6 Facility, Los Angeles, California

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Haley & Aldrich, Inc. is herein providing this groundwater monitoring well destruction report to summarize the destruction and final laboratory results from the groundwater monitoring well WCC-3D. Groundwater monitoring well WCC-3D was located along the northern boundary on Parcel C of the Boeing Realty Corporation's (BRC's) Former C-6 Facility in Los Angeles, California (Site) as shown on Figures 1 and 2.

#### **INTRODUCTION**

Groundwater monitoring well WCC-3D was installed on June 27, 1989, by Woodward Clyde Consultants (WCC) as part of a Site-wide groundwater monitoring program. The purpose of groundwater monitoring well WCC-3D was to facilitate sampling and measurement of groundwater conditions at the bottom of the Bellflower Aquitard. Groundwater monitoring well WCC-3D is constructed of 4-inch diameter Schedule-40 PVC screen and casing, extended to a depth of approximately 140 feet, and has a screened interval from approximately 120 to 140 feet below ground surface (bgs). The boring and well construction log is included in Appendix A. Based on the lithologic logging performed during a groundwater reconnaissance program in 2000 and 2001, it appeared that well WCC-3D was screened in the confining unit or Lower Bellflower unit of the Bellflower Aquitard.

The Los Angeles Regional Water Quality Control Board (LARWQCB) is the lead agency for the Site and the County of Los Angeles, Department of Health Services (DHS) is responsible for the permitting of groundwater monitoring wells at the Site. Haley & Aldrich, Inc. submitted a well destruction permit application to the DHS on June 5, 2002, notifying the DHS of the closure of groundwater monitoring well WCC-3D. A copy of the permit application is included as Appendix B.

## FIELD ACTIVITIES

The scope of work for WCC-3D consisted of monitoring and sampling groundwater, submitting the groundwater sample to the laboratory for analysis, and removing the well. These tasks are discussed below.

### Groundwater Monitoring and Sampling

TAIT Environmental Management, Inc. (Tait), BRC's groundwater monitoring and sampling subcontractor, gauged and sampled WCC-3D on March 21, 2002. The water level was gauged against the top of the well casing to the nearest 0.01-foot using an electronic water level indicator. The following information was recorded.

| Well No. | Top of Casing Elevation<br>(feet above MSL) | Depth to Water<br>(feet below top of casing) | Groundwater Elevation<br>(feet above MSL) |
|----------|---|--|---|
| WCC-3D   | 51.16                                       | 64.16  | -13.00                                    |

After the water level was gauged, WCC-3D was purged using a submersible pump. Purged water was monitored in the field for electronic conductivity, temperature, and pH. Three borehole volumes of water (approximately 147 gallons) were purged from WCC-3D and placed in a Department of Transportation (DOT) approved 55-gallon drum. The groundwater monitoring and sampling data sheet from the March sampling event is included as Appendix C.

Upon completion of well purging, a groundwater sample was collected using a disposable bailer with a bottom-emptying device. Three 40-ml VOA bottles were filled and placed in a cooler with ice and transported under standard chain-of-custody procedures to Severn Trent Laboratories (STL) in Santa Ana, California for analysis. The groundwater sample was analyzed for volatile organic compounds (VOCs) by EPA Method 8260B. Groundwater analytical results are included in Appendix D.

### Groundwater Sampling Results

Based on the results of the laboratory analyses of groundwater samples collected in March 2002 from WCC-3D, concentrations of the primary compounds of potential concern found at the Site are summarized in the following table (see Appendix D).

| Analyte                | Concentration in<br>WCC-3D ( $\mu\text{g/l}$ ) |
|------------------------|--|
| Cis-1,2-dichloroethene | 1.7  |
| 1,1,1-trichloroethane  | 6.7  |
| 1,1-dichloroethene     | 8.7  |
| Trichloroethene        | 1.8  |

$\mu\text{g/l}$  = micrograms per liter

## Well Destruction

West Hazmat Drilling, Inc. (WHD) was contracted by Haley & Aldrich, Inc. to destroy the well. The 4-inch PVC casing, screen, grout and sand pack was destroyed by overdrilling with an 11½-inch outside diameter (OD) auger to a total depth of approximately 140 feet bgs. To facilitate the access to the well, the well casing was fitted with a PVC extension and surrounding grade was raised. The casing was unable to be pulled intact due to the pressure of the PVC casing extension. The materials recovered during drilling were transferred into a roll-off bin for temporary onsite storage pending final disposition.

A photoionization detector (PID) was used during the fieldwork to monitor the level of VOCs present in soil cuttings and the breathing zone. The PID used for this investigation was a RAE Systems MiniRAE Plus with a 10.6 eV lamp. PID readings did not exceed 1.1 parts per million (ppm).

Following the overdrilling, the borehole was grouted with a mixture of approximately 5 bags (94 pounds each) of Portland cement per 40 gallons of water; for a total grout volume of approximately 750 gallons. During grout placement, a 1.5-inch diameter tremie pipe was placed at the bottom of the 11½-inch OD auger and grout was placed in 20-foot lifts from the total depth to approximately 8 feet bgs. The borehole was filled from 8 feet bgs to the surface with bentonite chips resulting in a total volume of approximately 922 gallons of grout and bentonite (greater than the approximate volume of the borehole). The following observations were recorded during the destruction activities:

### Well Destruction Observations for WCC-3D

| Overdrilling Observations  | WCC-3D          |
|--|-----------------|
| Original Depth of Well, feet   | 140             |
| Depth of overdrilling (feet)   | 141             |
| Blank casing removed in feet   | 120             |
| Screened casing removed in feet                                      | 20              |
| Auger depth before cuttings observed, feet bgs                       | 0               |
| Bentonite – grout/sand mix removed, cubic yards                      | Approximately 4 |
| Backfilling Observations   |                 |
| Backfill mixture, Portland (bags)/ Hydrogel (bags) / water (gallons) | 43/21.5/572     |
| Total quantity of Portland cement used (bags)                        | 43              |
| Total Quantity of Hydrogel used (bags)                               | 21.5            |

A well decommissioning report form is included in Appendix E.

## WASTE STORAGE, HAULING AND DISPOSAL

Purge and decontamination water from the groundwater sampling and well destruction activities was stored in four 55-gallon drums. Waste from the well destruction activities (sand pack and sealing materials) was contained in a roll-off bin. One soil sample was collected from the bin (the laboratory report designation is SP-38) and analyzed for Title 22 metals by EPA Methods 6010B and 7471, VOCs by EPA Method 8260B, total petroleum hydrocarbons (TPH) by EPA Method 8015B and polyaromatic hydrocarbons (PAHs) by EPA Method 8310. The analytical report for this sample is also included in Appendix D. The soil and wastewater are pending disposition by BRC.

Well Destruction Report WCC-3D

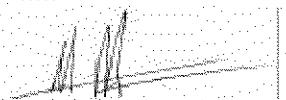
June 28, 2002

Page 4

Should you have any questions concerning the contents of this memorandum or require additional information, please contact either of the undersigned.

Sincerely yours,

Haley & Aldrich, Inc.



Richard M. Farson, PE  
Project Engineer



Scott P. Zachary  
Project Manager

Attachments:

Figure 1 - Site Location Map

Figure 2 – WCC-3D Location Map

Appendix A – Boring and Well Construction Log for WCC-3D

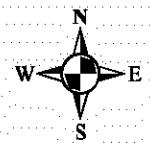
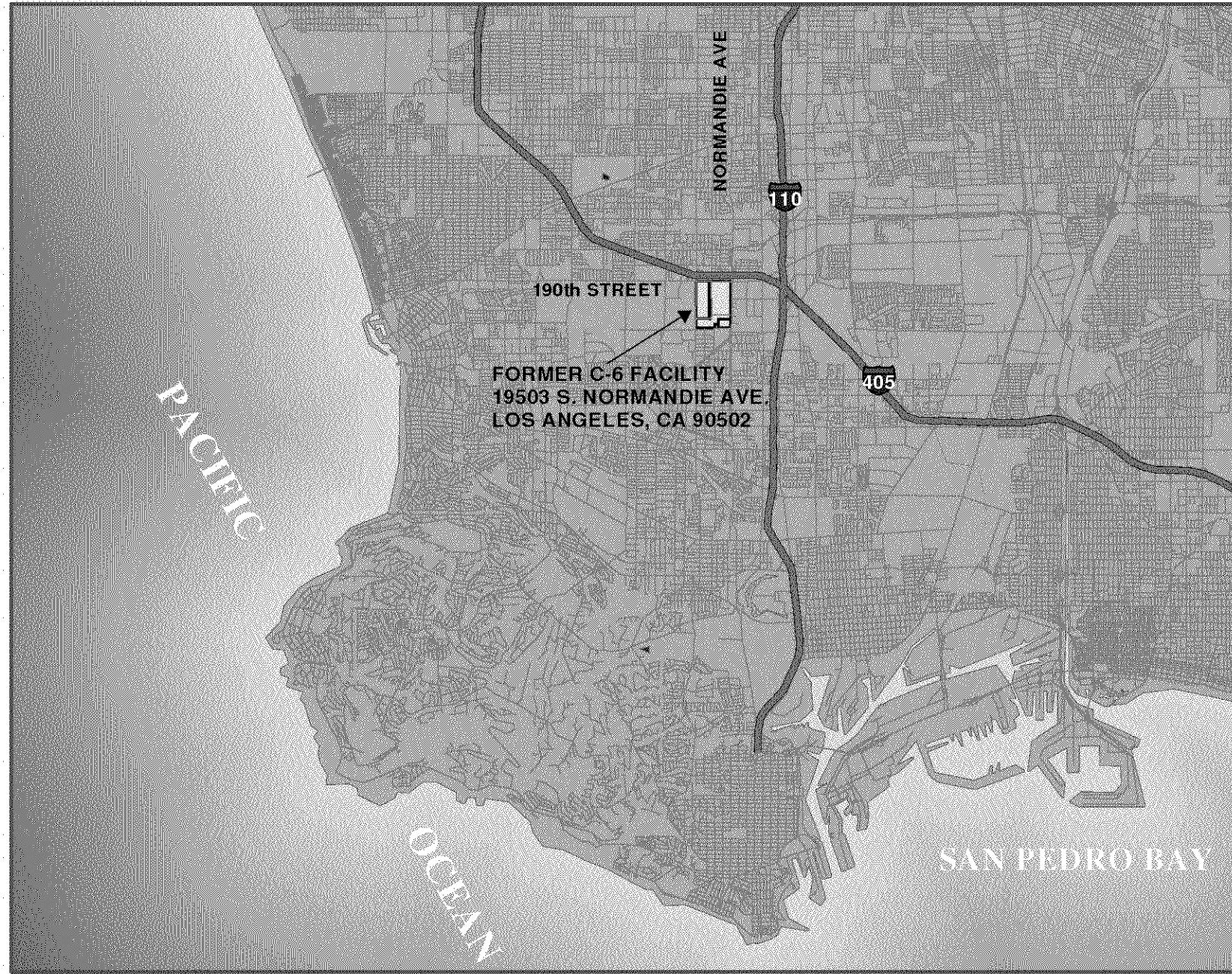
Appendix B - County of Los Angeles Well Destruction Permit

Appendix C – Groundwater Sampling Data Sheet

Appendix D – Laboratory Reports & Chain of Custody

Appendix E – Well Decommissioning Report

## **FIGURES**



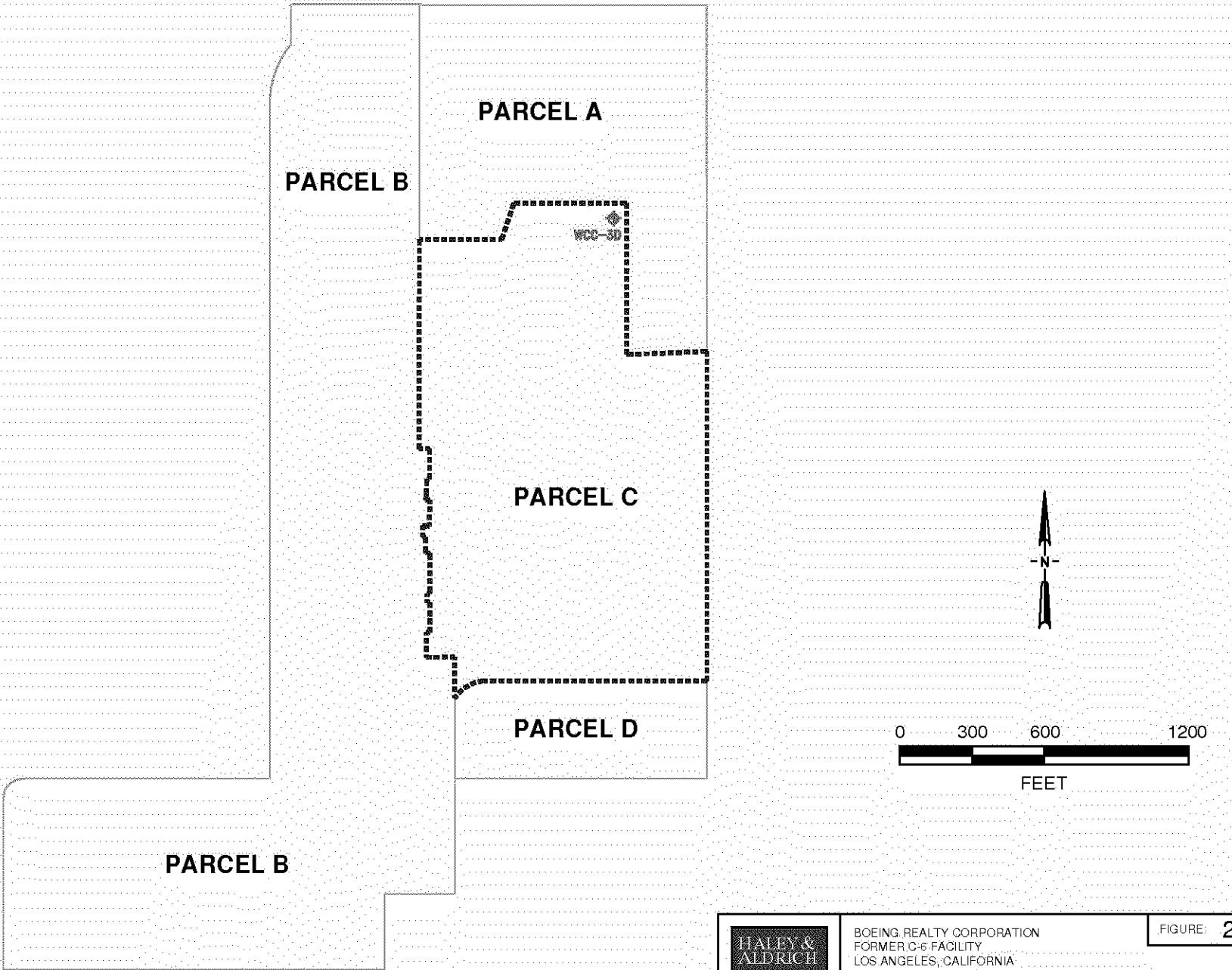
0 0.5 1 2 3 Miles

**Figure 1**  
**Site Location Map**

Boeing Realty Corporation  
Former C-6 Facility  
Los Angeles, California

**HAILEY & ALDRICH** UNDERGROUND ENGINEERING &  
ENVIRONMENTAL SOLUTIONS

Scale : As Shown QA/QC : Project : 27285  
Drawn : DFM Reviewed : SP2 Date : 1 March 2002



SOURCE: Kennedy/Jenks Consultants, Sampling & Analysis Plan,  
Boeing Realty Corporation's C-6 Facility—Parcel C, Los Angeles, California, 18 August, 2000

G:\PROJECTS\ENVIRONMENTAL\BOEING\G-6\WELL DEMO\WCC-3D\FIGURE 2



HALEY &  
ALDRICH  
UNDERGROUND  
ENGINEERING &  
ENVIRONMENTAL  
SOLUTIONS

BOEING REALTY CORPORATION  
FORMER C-6 FACILITY  
LOS ANGELES, CALIFORNIA

**PARCEL C SITE PLAN  
GROUNDWATER MONITORING WELL  
WCC-3D LOCATION**

SCALE: AS SHOWN

PROJECT: 27285

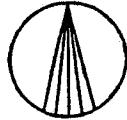
DRAWN: SAL REVIEWED: RLM

DATE: 28 JUNE 2002

FIGURE: 2

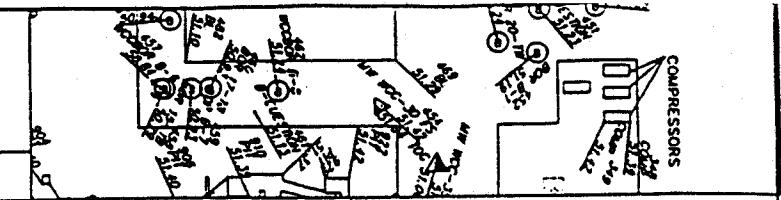
BOE-C6-0003240

**Appendix A**  
**Boring and Well Construction Log**



**INTEGRATED  
Environmental Services, Inc.**

Object Name: McDonnell Douglas C-6 Facility



Location: Los Angeles, CA

Site Id: WCC-030

Elevation: 51.42'

Datum: Mean Sea Level

Total Depth: 140.00'

X Coordinate: 12583.61

Y Coordinate: 13265.87

Date Started: 06/23/89

Date Completed: 06/27/89

Consulting Firm: WOODWARD-CLYDE

Contractor: BEYLIK DRILLING

Logged By: H. REYES

Certified By: M. RAZMDJOO

Annular Fill:

fm: 0.00' to: 5.00'

type: Cement

fm: 5.00' to: 106.00'

type: Grout

fm: 106.00' to: 115.00'

type: Bentonite Pellets

Screens:

type: Slotted size: 0.010in dic: 4.00in fm: 120.00' to: 140.00'

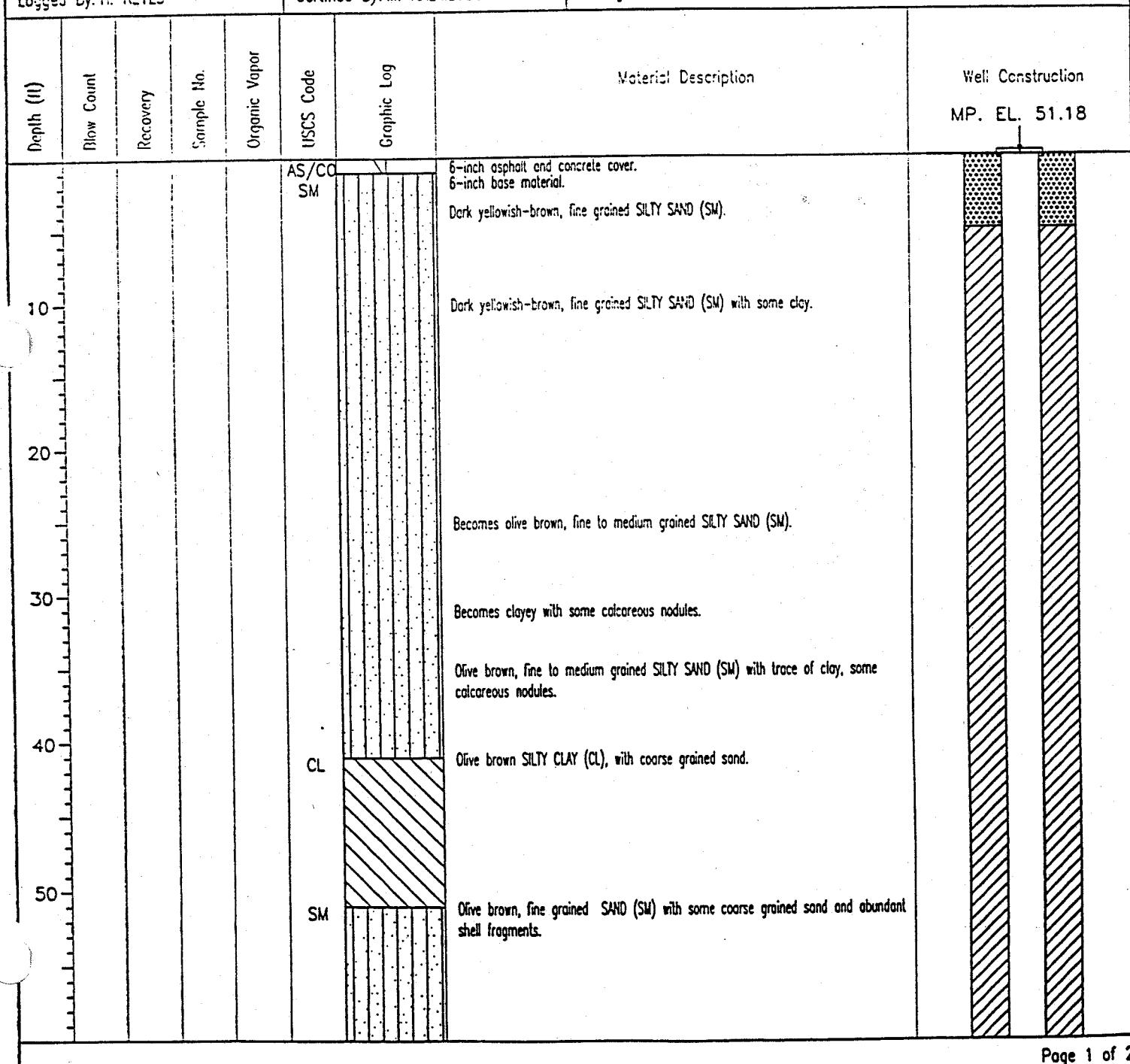
Blank Casing:

type: PVC dic: 4.00in fm: 0.0' to: 120.00'

Conductor Casing:

type: dic: 0.00in fm: 0.00' to: 0.00'

Drilling Method: HOLLOW-STEM AUGER





**Appendix B**  
**County of Los Angeles Well Destruction Permit**

**SERVICE APPLICATION AND FEE COLLECTION  
COUNTY OF LOS ANGELES - DEPARTMENT OF HEALTH SERVICES  
PUBLIC HEALTH PROGRAMS - ENVIRONMENTAL HEALTH  
SERVICE REQUEST APPLICATION**

**INSTRUCTIONS**

1. Check the TYPE OF SERVICE requested and attach the required non-refundable fee to the application. Make money order or check payable to LOS ANGELES COUNTY TREASURER, DO NOT SEND CASH. This application is nontransferable.

**FEES REQUIRED\***

**TYPE OF SERVICE**

- MONITORING WELL CONSTRUCTION/DESTRUCTION**  
  
**WELL CONSTRUCTION, RENOVATION OR DESTRUCTION PERMIT**  
Complete and attach a Well Permit Application  
  
**PRIVATE SEWAGE DISPOSAL SYSTEM CONSTRUCTION PERMIT**  
  
**PRIVATE SEWAGE DISPOSAL SYSTEM RENOVATION/EXPANSION**  
  
**INSPECTION OF MOUNTAIN CABIN SITE** as required by the  
United States Forest Service  
  
**INSPECTION OF EXISTING PRIVATE SEWAGE SYSTEM** as required  
by FHAVA  
  
**WATER SUPPLY TEST AND CERTIFICATION** as required by U.S.  
Department of Agriculture

2. Check with Contact Office stamped below for requirements or information.
3. Complete the required information or deliver the completed application, money order or check with the forms indicated.

to: County of Los Angeles  
Department of Health Services  
Public Health Programs  
Environmental Health  
2525 Corporate Place  
Monterey Park, Ca 91754  
(213) 881-4147

\* Refer to Schedule of Fees  
for current fiscal year.

**NOTE: FIELD PERSONNEL CANNOT ACCEPT FEES.**

4. Phone Contact Office noted below, after you have received your receipt, to request an inspection.

19573 Newmarket Avenue, Los Angeles, CA 91343  
5/15/02

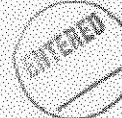
|   |                            |              |              |
|---|----------------------------|--------------|--------------|
| Service/Job Location Address  | Date                       |              |              |
| Hanita Avenue, Inc.   | 06/15/02                   |              |              |
| Owner/Applicant's Name  | Address                    | Phone No.    |              |
| John H. and D. H. Inc.  | 9041 Hanita Rd., Suite 100 | 619-210-2220 |              |
| Contractor's Name   | Address                    | Phone No.    |              |
| Co. Engineer Plan Check No.   | Tract No.                  | Lot No.      | No. Bedrooms |
| (Complete line above for Private Sewage Disposal System Construction or Renovation Application) |                            |              |              |

CONTACT OFFICE

DEPARTMENT STAMP



Printed on recycled materials.



CH # 10940 0  
BCH # 360763  
6/16/02

**Appendix C**  
**Groundwater Sampling Data Sheet**



TAIT Environmental Management, Inc.

## Groundwater Sampling Data Sheet

Page 5 of 1

| Project Name: Boeing - Compton - GW Sampling          |                                      |                           |                          | Date: 3/21/02<br>Prepared By: NC/RK<br>Pump Intake Depth (ft-bmp): |                                 |                                       |                        |                       |                         |          |              |
|---|--------------------------------------|---------------------------|--------------------------|--|---------------------------------|---------------------------------------|------------------------|-----------------------|-------------------------|----------|--------------|
| Project No.: R_EM_0303<br>Well Identification: WOC-3D |                                      |                           |                          |  |                                 |                                       |                        |                       |                         |          |              |
| Measurement Point Description:                        |                                      |                           |                          |  |                                 |                                       |                        |                       |                         |          |              |
| Depth to LNAPL (ft-bmp)                               | Depth to Static Water Level (ft-bmp) | Well Total Depth (ft-bmp) | Water Column Height (ft) | LNAPL Thickness (ft)   | One (1) Casing Volume (gallons) | Three (3) Casing Volumes (gallons)    |                        |                       |                         |          |              |
| ND  | 64.16                                | 139.45                    | 75.29                    | NA   | 49                              | 147                                   |                        |                       |                         |          |              |
| Well Diameter (in)                                    |                                      | Gallons/Foot              |                          |  | Field Equipment: SEE DAILY LOG  |                                       |                        |                       |                         |          |              |
|   |                                      | 0.75                      | 2                        | 4  | 6                               | Purge Method:                         |                        |                       |                         |          |              |
| 0.75  | 2                                    | 4                         | 6                        | 0.02   | 0.16                            | 0.65                                  | 1.47                   | Well Condition: GOOD  |                         |          |              |
| Time  | Casing Volumes Purged                | Volume Purged (gallons)   | Flow Rate (gpm)          | Water Level (ft-bmp)   | pH                              | Temperature (°C)                      | Turbidity (NTU)        | Conductivity (µS/cm)  | Dissolved Oxygen (mg/L) | ORP (mV) | Observations |
| 14:37   | 0.5                                  | 24.5                      | 0.89                     | 74.02  | 7.44                            | 23.13                                 | 2.8                    | 0.822                 | 0.10                    | -82      | clear        |
| 14:54   | 1                                    | 49                        | 1.4                      | 74.12  | 7.46                            | 23.11                                 | 3.2                    | 0.804                 | 0.00                    | -90      | clear        |
| 15:11   | 1.5                                  | 73.5                      | 1.4                      | 74.15  | 7.47                            | 23.14                                 | 3.3                    | 0.803                 | 0.00                    | -91      | clear        |
| 15:28   | 2                                    | 98                        | 1.4                      | 74.05  | 7.48                            | 23.13                                 | 3.6                    | 0.804                 | 0.00                    | -90      | clear        |
| 15:45   | 2.5                                  | 122.5                     | 1.4                      | 74.28  | 7.48                            | 23.15                                 | 3.7                    | 0.805                 | 0.00                    | -89      | clear        |
| 16:02   | 3                                    | 147                       | 1.4                      | 74.22  | 7.48                            | 23.08                                 | 3.9                    | 0.805                 | 0.00                    | -88      | clear        |
| Purge Start Time                                      | Purge End Time                       | Average Flow (gpm)        | Total Gallons Purged     | Total Casing Volumes Purged  | 80% Recovery Water Level Depth  | Water Level at Sampling Time (ft-bmp) | Sample Collection Time | Sample Identification |                         |          |              |
| 14:09   | 16:02                                | 1.3                       | 147                      | 3  | 79.22                           | 74.22                                 | 16:05                  | WOC-3D-032102-1605    |                         |          |              |

Notes: Soft Well bottom

PID = 0.2 ppm

ft-bmp = feet below measuring point

LNAPL = light non-aqueous phase liquid

M:\ITEM2\Field Forms\Well Sampling Field Data Sheet.DOC

**Appendix D**  
**Laboratory Report & Chain-of-Custody**

SEVERN  
TRENT  
SERVICES

May 21, 2002

STL LOT NUMBER: E2C210335r  
NELAP Certification Number: 01118CA  
PO/CONTRACT: 05160-SEV002

Scott Ek  
Tait Environmental  
701 Park Center Drive  
Santa Ana, CA 92705

STL Los Angeles  
1721 South Grand Avenue  
Santa Ana, CA 92705-4808

Tel: 714 258 8610  
Fax: 714 258 0921  
[www.stl-inc.com](http://www.stl-inc.com)

Dear Mr. Ek:

This report contains the analytical results for the seven samples received under chain of custody by STL Los Angeles on March 21, 2002. These samples are associated with your BRC former C-6 Torrance Harbor Gateway project.

This report has been revised to include the 8260 compound 1,1-DCE that was omitted from the original report. All applicable quality control procedures met method-specified acceptance criteria. See Project Receipt Checklist for container temperature and conditions. Temperature reading between 2 to 6 degrees Celsius is considered within acceptable criteria. Any matrix related anomaly is footnoted within the report.

STL Los Angeles certifies that the tests performed at our facility meet all NELAP requirements for parameters for which accreditation is required or available. The case narrative is an integral part of the report. This report shall not be reproduced except in full, without the written approval of the laboratory.

If you have any questions, please feel free to call me at (714) 258-8610 extension 309.

Sincerely,



Diane Suzuki  
Project Manager

CC: Project File

000030  
Page 1 of \_\_\_\_\_ total pages in this report.

000001

STL Los Angeles is a part of Severn Trent Laboratories, Inc.



**Chain of  
Custody Record**

**SEVERN  
TRENT  
SERVICES**

**Severn Trent Laboratories, Inc.**

STL-4124 (0700)

| Client<br><b>TAIT ENVIRONMENTAL MGMT</b>  |                    | Project Manager<br><b>SCOTT E. EK</b>   |  | Date<br><b>3/21/02</b>                         | Chain of Custody Number<br><b>050486</b> |         |                                |   |     |      |                   |
|---|--------------------|---|--|--|--|---------|--------------------------------|---|-----|------|-------------------|
| Address<br><b>701 N. PARKCENTER PR</b>  |                    | Telephone Number (Area Code)/Fax Number<br><b>(714) 560-8200 / (714) 560-8235</b> |  | Lab Number<br><b>E2C210335</b>                 | Page <b>1</b> of <b>1</b>                |         |                                |   |     |      |                   |
| City<br><b>SANTA ANA</b>  | State<br><b>CA</b> | Zip Code<br><b>92705</b>  | Site Contact<br><b>D. SUZUKI</b>   | Analysis (Attach list if more space is needed) |  |         |                                |   |     |      |                   |
| Project Name and Location (State)<br><b>BOEING - TORRANCE</b>   |                    | Carrier/Waybill Number  |  | Special Instructions/<br>Conditions of Receipt |  |         |                                |   |     |      |                   |
| Contract/Purchase Order/Quote No.   |                    |   |  |  |  |         |                                |   |     |      |                   |
| Sample I.D. No. and Description<br>(Containers for each sample may be combined on one line)   | Date               | Time  | Matrix   |  | Containers & Preservatives               |         |                                |   |     |      |                   |
|   |                    |   | Air  | Soil   | Soil                                     | Unspec. | H <sub>2</sub> SO <sub>4</sub> | HNO <sub>3</sub>                            | HCl | NaOH | ZnAc <sub>2</sub> |
| EB-TAIT032102-0001  | 3/21/02            | 8:45  | X  |  |  | 3       |                                |   |     | X    |                   |
| QMW-09-032102-0945  | 3/21/02            | 9:45  | X  |  |  | 3       |                                |   |     | X    |                   |
| QNC-55-032102-1055  | 3/21/02            | 10:55   | X  |  |  | 3       |                                |   |     | X    |                   |
| TMW-16-032102-1205  | 3/21/02            | 12:05   | X  |  |  | 3       |                                |   |     | X    |                   |
| TMW-10-032102-1320  | 3/21/02            | 13:20   | X  |  |  | 3       |                                |   |     | X    |                   |
| WCC-3D-032102-1605  | 3/21/02            | 14:05   | X  |  |  | 3       |                                |   |     | X    |                   |
| TB-TAIT032102-0001  | 3/21/02            |   | X  |  |  | 3       |                                |   |     | X    |                   |
|   |                    |   |  |  |  |         |                                |   |     |      |                   |
|   |                    |   |  |  |  |         |                                |   |     |      |                   |
|   |                    |   |  |  |  |         |                                |   |     |      |                   |
|   |                    |   |  |  |  |         |                                |   |     |      |                   |
|   |                    |   |  |  |  |         |                                |   |     |      |                   |
| Possible Hazard Identification  |                    |   | Sample Disposal  |  |  |         |                                |   |     |      |                   |
| <input checked="" type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown |                    |   | <input type="checkbox"/> Return To Client <input checked="" type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months<br><small>(A fee may be assessed if samples are retained longer than 3 months)</small> |  |  |         |                                |   |     |      |                   |
| Turn Around Time Required   |                    |   |  |  |  |         |                                |   |     |      |                   |
| <input type="checkbox"/> 24 Hours <input type="checkbox"/> 48 Hours <input type="checkbox"/> 7 Days <input type="checkbox"/> 14 Days <input type="checkbox"/> 21 Days                       |                    |   | <input checked="" type="checkbox"/> Other <b>STANDARD</b>  |  |  |         |                                |   |     |      |                   |
| 1. Relinquished By<br><b>Mutya Chandan</b>  |                    |   | Date<br><b>3/21/02</b>   | Time<br><b>17:53</b>                           | 1. Received By<br><b>Be coetz</b>        |         |                                | Date<br><b>3/21/02</b> Time<br><b>17:53</b> |     |      |                   |
| 2. Relinquished By  |                    |   | Date   | Time   | 2. Received By                           |         |                                | Date  |     |      |                   |
| 3. Relinquished By  |                    |   | Date   | Time   | 3. Received By                           |         |                                | Date  |     |      |                   |
| Comments  |                    |   |  |  |  |         |                                |   |     |      |                   |

DISTRIBUTION: WHITE - Stays with the Sample; CANARY - Returned to Client with Report; PINK - Field Copy



SEVERN  
TRENT  
SERVICES

# Analytical Report

**000004**

## EXECUTIVE SUMMARY - Detection Highlights

E2C210335

| PARAMETER                                    | RESULT | REPORTING LIMIT | UNITS | ANALYTICAL METHOD |
|--|--------|-----------------|-------|-------------------|
| <b>EB_TAIT032102_0001 03/21/02 08:45 001</b> |        |                 |       |                   |
| Acetone                                      | 14     | 10              | ug/L  | SW846 8260B       |
| <b>XMW_09_032102_0945 03/21/02 09:45 002</b> |        |                 |       |                   |
| Chlorobenzene                                | 260    | 25              | ug/L  | SW846 8260B       |
| Chloroform                                   | 1400   | 25              | ug/L  | SW846 8260B       |
| Tetrachloroethene                            | 55     | 25              | ug/L  | SW846 8260B       |
| Trichloroethene                              | 30     | 25              | ug/L  | SW846 8260B       |
| <b>WCC_55_032102_1055 03/21/02 10:55 003</b> |        |                 |       |                   |
| Chlorobenzene                                | 0.42 J | 1.0             | ug/L  | SW846 8260B       |
| Chloroform                                   | 0.76 J | 1.0             | ug/L  | SW846 8260B       |
| Tetrachloroethene                            | 0.42 J | 1.0             | ug/L  | SW846 8260B       |
| Toluene                                      | 5.5    | 1.0             | ug/L  | SW846 8260B       |
| Trichloroethene                              | 1.8    | 1.0             | ug/L  | SW846 8260B       |
| Trichlorofluoromethane                       | 0.61 J | 2.0             | ug/L  | SW846 8260B       |
| 1,1-Dichloroethene                           | 6.2    | 1.0             | ug/L  | SW846 8260B       |
| <b>TMW_16_032102_1205 03/21/02 12:05 004</b> |        |                 |       |                   |
| Acetone                                      | 4.7 J  | 10              | ug/L  | SW846 8260B       |
| Chloroform                                   | 0.47 J | 1.0             | ug/L  | SW846 8260B       |
| Isopropylbenzene                             | 0.35 J | 1.0             | ug/L  | SW846 8260B       |
| Tetrachloroethene                            | 0.94 J | 1.0             | ug/L  | SW846 8260B       |
| Toluene                                      | 1.1    | 1.0             | ug/L  | SW846 8260B       |
| Trichloroethene                              | 1.6    | 1.0             | ug/L  | SW846 8260B       |
| <b>TMW_10_032102_1320 03/21/02 13:20 005</b> |        |                 |       |                   |
| Dichlorodifluoromethane                      | 1.7    | 1.0             | ug/L  | SW846 8260B       |
| Chloroform                                   | 3.0    | 1.0             | ug/L  | SW846 8260B       |
| Tetrachloroethene                            | 0.88 J | 1.0             | ug/L  | SW846 8260B       |
| Toluene                                      | 5.5    | 1.0             | ug/L  | SW846 8260B       |
| Trichloroethene                              | 3.7    | 1.0             | ug/L  | SW846 8260B       |
| Trichlorofluoromethane                       | 1.2 J  | 2.0             | ug/L  | SW846 8260B       |
| <b>WCC_3D_032102_1605 03/21/02 16:05 006</b> |        |                 |       |                   |
| Acetone                                      | 7.1 J  | 10              | ug/L  | SW846 8260B       |
| cis-1,2-Dichloroethene                       | 1.7    | 1.0             | ug/L  | SW846 8260B       |
| Toluene                                      | 3.0    | 1.0             | ug/L  | SW846 8260B       |
| 1,1,1-Trichloroethane                        | 6.7    | 1.0             | ug/L  | SW846 8260B       |

(Continued on next page)

**000005**

## **EXECUTIVE SUMMARY - Detection Highlights**

E2C210335

| <u>PARAMETER</u>                             | <u>RESULT</u> | <u>REPORTING<br/>LIMIT</u> | <u>UNITS</u> | <u>ANALYTICAL<br/>METHOD</u> |
|--|---------------|----------------------------|--------------|------------------------------|
| <b>WCC_3D_032102_1605 03/21/02 16:05 006</b> |               |                            |              |                              |
| Trichloroethene                              | 1.8           | 1.0                        | ug/L         | SW846 8260B                  |
| 1,1-Dichloroethene                           | 8.7           | 1.0                        | ug/L         | SW846 8260B                  |
| <b>TB_TAIT032102_0001 03/21/02 007</b>       |               |                            |              |                              |
| Acetone                                      | 7.2 J         | 10                         | ug/L         | SW846 8260B                  |

**000006**

## METHODS SUMMARY

E2C210335

| <u>PARAMETER</u>           | <u>ANALYTICAL<br/>METHOD</u> | <u>PREPARATION<br/>METHOD</u> |
|----------------------------|------------------------------|-------------------------------|
| Volatile Organics by GC/MS | SW846 8260B                  | SW846 5030B/826               |

### References:

SW846 "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 and its updates.

000007

# SAMPLE SUMMARY

E2C210335

| WO #  | SAMPLE# | CLIENT SAMPLE ID   | SAMPLED DATE | SAMP TIME |
|-------|---------|--------------------|--------------|-----------|
| EWRFE | 001     | EB_TAIT032102_0001 | 03/21/02     | 08:45     |
| EWRFF | 002     | XMW_09_032102_0945 | 03/21/02     | 09:45     |
| EWRFG | 003     | WCC_55_032102_1055 | 03/21/02     | 10:55     |
| EWRFH | 004     | TMW_16_032102_1205 | 03/21/02     | 12:05     |
| EWRFJ | 005     | TMW_10_032102_1320 | 03/21/02     | 13:20     |
| EWRFK | 006     | WCC_3D_032102_1605 | 03/21/02     | 16:05     |
| EWRFL | 007     | TB_TAIT032102_0001 | 03/21/02     |           |

**NOTE (S) :**

- The analytical results of the samples listed above are presented on the following pages.
- All calculations are performed before rounding to avoid round-off errors in calculated results.
- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.

000008

## TAIT ENVIRONMENTAL

Client Sample ID: EB\_TAIT032102\_0001

## GC/MS Volatiles

Lot-Sample #....: E2C210335-001 Work Order #....: EWRFE1AA Matrix.....: WATER  
 Date Sampled....: 03/21/02 08:45 Date Received...: 03/21/02 17:53  
 Prep Date.....: 03/21/02 Analysis Date...: 03/22/02  
 Prep Batch #....: 2081279 Method.....: SW846 8260B

| PARAMETER                | REPORTING |       |       |
|--------------------------|-----------|-------|-------|
|                          | RESULT    | LIMIT | UNITS |
| Acetone                  | 14        | 10    | ug/L  |
| Benzene                  | ND        | 1.0   | ug/L  |
| Bromobenzene             | ND        | 1.0   | ug/L  |
| Bromochloromethane       | ND        | 1.0   | ug/L  |
| Bromoform                | ND        | 1.0   | ug/L  |
| Bromomethane             | ND        | 2.0   | ug/L  |
| Carbon tetrachloride     | ND        | 0.50  | ug/L  |
| 2-Butanone               | ND        | 5.0   | ug/L  |
| n-Butylbenzene           | ND        | 1.0   | ug/L  |
| sec-Butylbenzene         | ND        | 1.0   | ug/L  |
| tert-Butylbenzene        | ND        | 1.0   | ug/L  |
| Carbon disulfide         | ND        | 1.0   | ug/L  |
| Chlorobenzene            | ND        | 1.0   | ug/L  |
| Dibromochloromethane     | ND        | 1.0   | ug/L  |
| Dichlorodifluoromethane  | ND        | 1.0   | ug/L  |
| Bromodichloromethane     | ND        | 1.0   | ug/L  |
| 1,2-Dichloroethane       | ND        | 0.50  | ug/L  |
| Chloroethane             | ND        | 2.0   | ug/L  |
| Chloroform               | ND        | 1.0   | ug/L  |
| Chloromethane            | ND        | 2.0   | ug/L  |
| 2-Chlorotoluene          | ND        | 1.0   | ug/L  |
| 4-Chlorotoluene          | ND        | 1.0   | ug/L  |
| 1,2-Dibromo-3-chloro-    | ND        | 2.0   | ug/L  |
| propane                  |           |       |       |
| 1,2-Dibromoethane        | ND        | 1.0   | ug/L  |
| Iodomethane              | ND        | 2.0   | ug/L  |
| 1,2-Dichlorobenzene      | ND        | 1.0   | ug/L  |
| 1,3-Dichlorobenzene      | ND        | 1.0   | ug/L  |
| 1,4-Dichlorobenzene      | ND        | 1.0   | ug/L  |
| 1,1-Dichloroethane       | ND        | 1.0   | ug/L  |
| cis-1,2-Dichloroethene   | ND        | 1.0   | ug/L  |
| trans-1,2-Dichloroethene | ND        | 1.0   | ug/L  |
| Vinyl chloride           | ND        | 0.50  | ug/L  |
| 2,2-Dichloropropane      | ND        | 1.0   | ug/L  |
| 1,1-Dichloropropene      | ND        | 1.0   | ug/L  |
| Ethylbenzene             | ND        | 1.0   | ug/L  |
| Hexachlorobutadiene      | ND        | 1.0   | ug/L  |
| 2-Hexanone               | ND        | 5.0   | ug/L  |
| Isopropylbenzene         | ND        | 1.0   | ug/L  |
| p-Isopropyltoluene       | ND        | 1.0   | ug/L  |

(Continued on next page)

000009

## TAIT ENVIRONMENTAL

Client Sample ID: EB\_TAIT032102\_0001

## GC/MS Volatiles

Lot-Sample #....: E2C210335-001 Work Order #....: EWRFE1AA Matrix.....: WATER

| PARAMETER                 | RESULT              | REPORTING  |       |
|---------------------------|---------------------|------------|-------|
|                           |                     | LIMIT      | UNITS |
| Methylene chloride        | ND                  | 1.0        | ug/L  |
| 4-Methyl-2-pentanone      | ND                  | 5.0        | ug/L  |
| Methyl tert-butyl ether   | ND                  | 1.0        | ug/L  |
| n-Propylbenzene           | ND                  | 1.0        | ug/L  |
| Styrene                   | ND                  | 1.0        | ug/L  |
| 1,1,1,2-Tetrachloroethane | ND                  | 1.0        | ug/L  |
| 1,1,2,2-Tetrachloroethane | ND                  | 1.0        | ug/L  |
| Tetrachloroethene         | ND                  | 1.0        | ug/L  |
| Toluene                   | ND                  | 1.0        | ug/L  |
| 1,2,3-Trichlorobenzene    | ND                  | 1.0        | ug/L  |
| 1,2,4-Trichloro-          | ND                  | 1.0        | ug/L  |
| benzene                   |                     |            |       |
| 1,1,1-Trichloroethane     | ND                  | 1.0        | ug/L  |
| 1,1,2-Trichloroethane     | ND                  | 1.0        | ug/L  |
| Trichloroethene           | ND                  | 1.0        | ug/L  |
| Trichlorofluoromethane    | ND                  | 2.0        | ug/L  |
| 1,2,3-Trichloropropane    | ND                  | 1.0        | ug/L  |
| 1,1,2-Trichlorotrifluoro- | ND                  | 1.0        | ug/L  |
| ethane                    |                     |            |       |
| 1,2,4-Trimethylbenzene    | ND                  | 1.0        | ug/L  |
| 1,3,5-Trimethylbenzene    | ND                  | 1.0        | ug/L  |
| Xylenes (total)           | ND                  | 1.0        | ug/L  |
| Acrolein                  | ND                  | 20         | ug/L  |
| Acrylonitrile             | ND                  | 20         | ug/L  |
| Vinyl acetate             | ND                  | 5.0        | ug/L  |
| Tetrahydrofuran           | ND                  | 10         | ug/L  |
| 2-Chloroethyl vinyl ether | ND                  | 5.0        | ug/L  |
| 1,1-Dichloroethene        | ND                  | 1.0        | ug/L  |
| SURROGATE                 | PERCENT<br>RECOVERY | RECOVERY   |       |
|                           |                     | LIMITS     |       |
| Bromofluorobenzene        | 102                 | (75 - 130) |       |
| 1,2-Dichloroethane-d4     | 100                 | (65 - 135) |       |
| Toluene-d8                | 99                  | (80 - 130) |       |

000010

## TAIT ENVIRONMENTAL

Client Sample ID: XMW\_09\_032102\_0945

## GC/MS Volatiles

Lot-Sample #....: E2C210335-002 Work Order #....: EWRFF1AA Matrix.....: WATER  
 Date Sampled...: 03/21/02 09:45 Date Received...: 03/21/02 17:53  
 Prep Date.....: 03/21/02 Analysis Date...: 03/22/02  
 Prep Batch #....: 2081279 Method.....: SW846 8260B

| PARAMETER                | REPORTING |       |       |
|--------------------------|-----------|-------|-------|
|                          | RESULT    | LIMIT | UNITS |
| Acetone                  | ND        | 250   | ug/L  |
| Benzene                  | ND        | 25    | ug/L  |
| Bromobenzene             | ND        | 25    | ug/L  |
| Bromochloromethane       | ND        | 25    | ug/L  |
| Bromoform                | ND        | 25    | ug/L  |
| Bromomethane             | ND        | 50    | ug/L  |
| Carbon tetrachloride     | ND        | 12    | ug/L  |
| 2-Butanone               | ND        | 120   | ug/L  |
| n-Butylbenzene           | ND        | 25    | ug/L  |
| sec-Butylbenzene         | ND        | 25    | ug/L  |
| tert-Butylbenzene        | ND        | 25    | ug/L  |
| Carbon disulfide         | ND        | 25    | ug/L  |
| Chlorobenzene            | 260       | 25    | ug/L  |
| Dibromochloromethane     | ND        | 25    | ug/L  |
| Dichlorodifluoromethane  | ND        | 25    | ug/L  |
| Bromodichloromethane     | ND        | 25    | ug/L  |
| 1,2-Dichloroethane       | ND        | 12    | ug/L  |
| Chloroethane             | ND        | 50    | ug/L  |
| Chloroform               | 1400      | 25    | ug/L  |
| Chloromethane            | ND        | 50    | ug/L  |
| 2-Chlorotoluene          | ND        | 25    | ug/L  |
| 4-Chlorotoluene          | ND        | 25    | ug/L  |
| 1,2-Dibromo-3-chloro-    | ND        | 50    | ug/L  |
| propane                  |           |       |       |
| 1,2-Dibromoethane        | ND        | 25    | ug/L  |
| Iodomethane              | ND        | 50    | ug/L  |
| 1,2-Dichlorobenzene      | ND        | 25    | ug/L  |
| 1,3-Dichlorobenzene      | ND        | 25    | ug/L  |
| 1,4-Dichlorobenzene      | ND        | 25    | ug/L  |
| 1,1-Dichloroethane       | ND        | 25    | ug/L  |
| cis-1,2-Dichloroethene   | ND        | 25    | ug/L  |
| trans-1,2-Dichloroethene | ND        | 25    | ug/L  |
| Vinyl chloride           | ND        | 12    | ug/L  |
| 2,2-Dichloropropane      | ND        | 25    | ug/L  |
| 1,1-Dichloropropene      | ND        | 25    | ug/L  |
| Ethylbenzene             | ND        | 25    | ug/L  |
| Hexachlorobutadiene      | ND        | 25    | ug/L  |
| 2-Hexanone               | ND        | 120   | ug/L  |
| Isopropylbenzene         | ND        | 25    | ug/L  |
| p-Isopropyltoluene       | ND        | 25    | ug/L  |

(Continued on next page)

**000011**

## TAIT ENVIRONMENTAL

Client Sample ID: XMW\_09\_032102\_0945

## GC/MS Volatiles

Lot-Sample #...: E2C210335-002 Work Order #...: EWRFF1AA Matrix.....: WATER

| <u>PARAMETER</u>                    | <u>RESULT</u>  | <u>REPORTING</u> |               |
|-------------------------------------|----------------|------------------|---------------|
|                                     |                | <u>LIMIT</u>     | <u>UNITS</u>  |
| Methylene chloride                  | ND             | 25               | ug/L          |
| 4-Methyl-2-pentanone                | ND             | 120              | ug/L          |
| Methyl tert-butyl ether             | ND             | 25               | ug/L          |
| n-Propylbenzene                     | ND             | 25               | ug/L          |
| Styrene                             | ND             | 25               | ug/L          |
| 1,1,1,2-Tetrachloroethane           | ND             | 25               | ug/L          |
| 1,1,2,2-Tetrachloroethane           | ND             | 25               | ug/L          |
| Tetrachloroethene                   | 55             | 25               | ug/L          |
| Toluene                             | ND             | 25               | ug/L          |
| 1,2,3-Trichlorobenzene              | ND             | 25               | ug/L          |
| 1,2,4-Trichloro-<br>benzene         | ND             | 25               | ug/L          |
| 1,1,1-Trichloroethane               | ND             | 25               | ug/L          |
| 1,1,2-Trichloroethane               | ND             | 25               | ug/L          |
| Trichloroethene                     | 30             | 25               | ug/L          |
| Trichlorofluoromethane              | ND             | 50               | ug/L          |
| 1,2,3-Trichloropropane              | ND             | 25               | ug/L          |
| 1,1,2-Trichlorotrifluoro-<br>ethane | ND             | 25               | ug/L          |
| 1,2,4-Trimethylbenzene              | ND             | 25               | ug/L          |
| 1,3,5-Trimethylbenzene              | ND             | 25               | ug/L          |
| Xylenes (total)                     | ND             | 25               | ug/L          |
| Acrolein                            | ND             | 500              | ug/L          |
| Acrylonitrile                       | ND             | 500              | ug/L          |
| Vinyl acetate                       | ND             | 120              | ug/L          |
| Tetrahydrofuran                     | ND             | 250              | ug/L          |
| 2-Chloroethyl vinyl ether           | ND             | 120              | ug/L          |
| 1,1-Dichloroethene                  | ND             | 25               | ug/L          |
| <u>SURROGATE</u>                    | <u>PERCENT</u> | <u>RECOVERY</u>  |               |
|                                     |                | <u>RECOVERY</u>  | <u>LIMITS</u> |
| Bromofluorobenzene                  | 103            | (75 - 130)       |               |
| 1,2-Dichloroethane-d4               | 103            | (65 - 135)       |               |
| Toluene-d8                          | 102            | (80 - 130)       |               |

000012

## TAIT ENVIRONMENTAL

Client Sample ID: WCC\_55\_032102\_1055

## GC/MS Volatiles

Lot-Sample #....: E2C210335-003 Work Order #....: EWRFG1AA Matrix.....: WATER  
 Date Sampled....: 03/21/02 10:55 Date Received...: 03/21/02 17:53  
 Prep Date.....: 03/21/02 Analysis Date...: 03/22/02  
 Prep Batch #....: 2081279 Method.....: SW846 8260B

| PARAMETER                | REPORTING |       |       |
|--------------------------|-----------|-------|-------|
|                          | RESULT    | LIMIT | UNITS |
| Acetone                  | ND        | 10    | ug/L  |
| Benzene                  | ND        | 1.0   | ug/L  |
| Bromobenzene             | ND        | 1.0   | ug/L  |
| Bromoform                | ND        | 1.0   | ug/L  |
| Bromomethane             | ND        | 2.0   | ug/L  |
| Carbon tetrachloride     | ND        | 0.50  | ug/L  |
| 2-Butanone               | ND        | 5.0   | ug/L  |
| n-Butylbenzene           | ND        | 1.0   | ug/L  |
| sec-Butylbenzene         | ND        | 1.0   | ug/L  |
| tert-Butylbenzene        | ND        | 1.0   | ug/L  |
| Carbon disulfide         | ND        | 1.0   | ug/L  |
| Chlorobenzene            | 0.42 J    | 1.0   | ug/L  |
| Dibromochloromethane     | ND        | 1.0   | ug/L  |
| Dichlorodifluoromethane  | ND        | 1.0   | ug/L  |
| Bromodichloromethane     | ND        | 1.0   | ug/L  |
| 1,2-Dichloroethane       | ND        | 0.50  | ug/L  |
| Chloroethane             | ND        | 2.0   | ug/L  |
| Chloroform               | 0.76 J    | 1.0   | ug/L  |
| Chloromethane            | ND        | 2.0   | ug/L  |
| 2-Chlorotoluene          | ND        | 1.0   | ug/L  |
| 4-Chlorotoluene          | ND        | 1.0   | ug/L  |
| 1,2-Dibromo-3-chloro-    | ND        | 2.0   | ug/L  |
| propane                  |           |       |       |
| 1,2-Dibromoethane        | ND        | 1.0   | ug/L  |
| Iodomethane              | ND        | 2.0   | ug/L  |
| 1,2-Dichlorobenzene      | ND        | 1.0   | ug/L  |
| 1,3-Dichlorobenzene      | ND        | 1.0   | ug/L  |
| 1,4-Dichlorobenzene      | ND        | 1.0   | ug/L  |
| 1,1-Dichloroethane       | ND        | 1.0   | ug/L  |
| cis-1,2-Dichloroethene   | ND        | 1.0   | ug/L  |
| trans-1,2-Dichloroethene | ND        | 1.0   | ug/L  |
| Vinyl chloride           | ND        | 0.50  | ug/L  |
| 2,2-Dichloropropane      | ND        | 1.0   | ug/L  |
| 1,1-Dichloropropene      | ND        | 1.0   | ug/L  |
| Ethylbenzene             | ND        | 1.0   | ug/L  |
| Hexachlorobutadiene      | ND        | 1.0   | ug/L  |
| 2-Hexanone               | ND        | 5.0   | ug/L  |
| Isopropylbenzene         | ND        | 1.0   | ug/L  |
| p-Isopropyltoluene       | ND        | 1.0   | ug/L  |

(Continued on next page)

000013

## TAIT ENVIRONMENTAL

Client Sample ID: WCC\_55\_032102\_1055

## GC/MS Volatiles

Lot-Sample #....: E2C210335-003 Work Order #....: EWRFG1AA Matrix.....: WATER

| PARAMETER                           | RESULT              | REPORTING  |       |
|-------------------------------------|---------------------|------------|-------|
|                                     |                     | LIMIT      | UNITS |
| Methylene chloride                  | ND                  | 1.0        | ug/L  |
| 4-Methyl-2-pentanone                | ND                  | 5.0        | ug/L  |
| Methyl tert-butyl ether             | ND                  | 1.0        | ug/L  |
| n-Propylbenzene                     | ND                  | 1.0        | ug/L  |
| Styrene                             | ND                  | 1.0        | ug/L  |
| 1,1,1,2-Tetrachloroethane           | ND                  | 1.0        | ug/L  |
| 1,1,2,2-Tetrachloroethane           | ND                  | 1.0        | ug/L  |
| Tetrachloroethene                   | 0.42 J              | 1.0        | ug/L  |
| Toluene                             | 5.5                 | 1.0        | ug/L  |
| 1,2,3-Trichlorobenzene              | ND                  | 1.0        | ug/L  |
| 1,2,4-Trichloro-<br>benzene         | ND                  | 1.0        | ug/L  |
| 1,1,1-Trichloroethane               | ND                  | 1.0        | ug/L  |
| 1,1,2-Trichloroethane               | ND                  | 1.0        | ug/L  |
| Trichloroethene                     | 1.8                 | 1.0        | ug/L  |
| Trichlorofluoromethane              | 0.61 J              | 2.0        | ug/L  |
| 1,2,3-Trichloropropane              | ND                  | 1.0        | ug/L  |
| 1,1,2-Trichlorotrifluoro-<br>ethane | ND                  | 1.0        | ug/L  |
| 1,2,4-Trimethylbenzene              | ND                  | 1.0        | ug/L  |
| 1,3,5-Trimethylbenzene              | ND                  | 1.0        | ug/L  |
| Xylenes (total)                     | ND                  | 1.0        | ug/L  |
| Acrolein                            | ND                  | 20         | ug/L  |
| Acrylonitrile                       | ND                  | 20         | ug/L  |
| Vinyl acetate                       | ND                  | 5.0        | ug/L  |
| Tetrahydrofuran                     | ND                  | 10         | ug/L  |
| 2-Chloroethyl vinyl ether           | ND                  | 5.0        | ug/L  |
| 1,1-Dichloroethene                  | 6.2                 | 1.0        | ug/L  |
| SURROGATE                           | PERCENT<br>RECOVERY | RECOVERY   |       |
|                                     |                     | LIMITS     |       |
| Bromofluorobenzene                  | 102                 | (75 - 130) |       |
| 1,2-Dichloroethane-d4               | 100                 | (65 - 135) |       |
| Toluene-d8                          | 100                 | (80 - 130) |       |

## NOTE(S) :

J Estimated result. Result is less than RL.

000014

## TAIT ENVIRONMENTAL

Client Sample ID: TMW\_16\_032102\_1205

## GC/MS Volatiles

Lot-Sample #....: E2C210335-004 Work Order #....: EWRFH1AA Matrix.....: WATER  
 Date Sampled....: 03/21/02 12:05 Date Received...: 03/21/02 17:53  
 Prep Date.....: 03/21/02 Analysis Date...: 03/22/02  
 Prep Batch #....: 2081279 Method.....: SW846 8260B

| PARAMETER                | REPORTING |       |       |
|--------------------------|-----------|-------|-------|
|                          | RESULT    | LIMIT | UNITS |
| Acetone                  | 4.7 J     | 10    | ug/L  |
| Benzene                  | ND        | 1.0   | ug/L  |
| Bromobenzene             | ND        | 1.0   | ug/L  |
| Bromochloromethane       | ND        | 1.0   | ug/L  |
| Bromoform                | ND        | 1.0   | ug/L  |
| Bromomethane             | ND        | 2.0   | ug/L  |
| Carbon tetrachloride     | ND        | 0.50  | ug/L  |
| 2-Butanone               | ND        | 5.0   | ug/L  |
| n-Butylbenzene           | ND        | 1.0   | ug/L  |
| sec-Butylbenzene         | ND        | 1.0   | ug/L  |
| tert-Butylbenzene        | ND        | 1.0   | ug/L  |
| Carbon disulfide         | ND        | 1.0   | ug/L  |
| Chlorobenzene            | ND        | 1.0   | ug/L  |
| Dibromochloromethane     | ND        | 1.0   | ug/L  |
| Dichlorodifluoromethane  | ND        | 1.0   | ug/L  |
| Bromodichloromethane     | ND        | 1.0   | ug/L  |
| 1,2-Dichloroethane       | ND        | 0.50  | ug/L  |
| Chloroethane             | ND        | 2.0   | ug/L  |
| Chloroform               | 0.47 J    | 1.0   | ug/L  |
| Chloromethane            | ND        | 2.0   | ug/L  |
| 2-Chlorotoluene          | ND        | 1.0   | ug/L  |
| 4-Chlorotoluene          | ND        | 1.0   | ug/L  |
| 1,2-Dibromo-3-chloro-    | ND        | 2.0   | ug/L  |
| propane                  |           |       |       |
| 1,2-Dibromoethane        | ND        | 1.0   | ug/L  |
| Iodomethane              | ND        | 2.0   | ug/L  |
| 1,2-Dichlorobenzene      | ND        | 1.0   | ug/L  |
| 1,3-Dichlorobenzene      | ND        | 1.0   | ug/L  |
| 1,4-Dichlorobenzene      | ND        | 1.0   | ug/L  |
| 1,1-Dichloroethane       | ND        | 1.0   | ug/L  |
| cis-1,2-Dichloroethene   | ND        | 1.0   | ug/L  |
| trans-1,2-Dichloroethene | ND        | 1.0   | ug/L  |
| Vinyl chloride           | ND        | 0.50  | ug/L  |
| 2,2-Dichloropropane      | ND        | 1.0   | ug/L  |
| 1,1-Dichloropropene      | ND        | 1.0   | ug/L  |
| Ethylbenzene             | ND        | 1.0   | ug/L  |
| Hexachlorobutadiene      | ND        | 1.0   | ug/L  |
| 2-Hexanone               | ND        | 5.0   | ug/L  |
| Isopropylbenzene         | 0.35 J    | 1.0   | ug/L  |
| p-Isopropyltoluene       | ND        | 1.0   | ug/L  |

(Continued on next page)

000015

## TAIT ENVIRONMENTAL

Client Sample ID: TMW\_16\_032102\_1205

## GC/MS Volatiles

Lot-Sample #....: E2C210335-004 Work Order #....: EWRFH1AA Matrix.....: WATER

| <u>PARAMETER</u>                    | <u>RESULT</u>               | <u>REPORTING</u> |              |
|-------------------------------------|-----------------------------|------------------|--------------|
|                                     |                             | <u>LIMIT</u>     | <u>UNITS</u> |
| Methylene chloride                  | ND                          | 1.0              | ug/L         |
| 4-Methyl-2-pentanone                | ND                          | 5.0              | ug/L         |
| Methyl tert-butyl ether             | ND                          | 1.0              | ug/L         |
| n-Propylbenzene                     | ND                          | 1.0              | ug/L         |
| Styrene                             | ND                          | 1.0              | ug/L         |
| 1,1,1,2-Tetrachloroethane           | ND                          | 1.0              | ug/L         |
| 1,1,2,2-Tetrachloroethane           | ND                          | 1.0              | ug/L         |
| Tetrachloroethene                   | 0.94 J                      | 1.0              | ug/L         |
| Toluene                             | 1.1                         | 1.0              | ug/L         |
| 1,2,3-Trichlorobenzene              | ND                          | 1.0              | ug/L         |
| 1,2,4-Trichloro-<br>benzene         | ND                          | 1.0              | ug/L         |
| 1,1,1-Trichloroethane               | ND                          | 1.0              | ug/L         |
| 1,1,2-Trichloroethane               | ND                          | 1.0              | ug/L         |
| Trichloroethene                     | 1.6                         | 1.0              | ug/L         |
| Trichlorofluoromethane              | ND                          | 2.0              | ug/L         |
| 1,2,3-Trichloropropane              | ND                          | 1.0              | ug/L         |
| 1,1,2-Trichlorotrifluoro-<br>ethane | ND                          | 1.0              | ug/L         |
| 1,2,4-Trimethylbenzene              | ND                          | 1.0              | ug/L         |
| 1,3,5-Trimethylbenzene              | ND                          | 1.0              | ug/L         |
| Xylenes (total)                     | ND                          | 1.0              | ug/L         |
| Acrolein                            | ND                          | 20               | ug/L         |
| Acrylonitrile                       | ND                          | 20               | ug/L         |
| Vinyl acetate                       | ND                          | 5.0              | ug/L         |
| Tetrahydrofuran                     | ND                          | 10               | ug/L         |
| 2-Chloroethyl vinyl ether           | ND                          | 5.0              | ug/L         |
| 1,1-Dichloroethene                  | ND                          | 1.0              | ug/L         |
| <u>SURROGATE</u>                    | <u>PERCENT<br/>RECOVERY</u> | <u>RECOVERY</u>  |              |
|                                     |                             | <u>LIMITS</u>    |              |
| Bromofluorobenzene                  | 102                         | (75 - 130)       |              |
| 1,2-Dichloroethane-d4               | 102                         | (65 - 135)       |              |
| Toluene-d8                          | 98                          | (80 - 130)       |              |

NOTE (S) :

J Estimated result. Result is less than RL.

000016

## TAIT ENVIRONMENTAL

Client Sample ID: TMW\_10\_032102\_1320

## GC/MS Volatiles

Lot-Sample #....: E2C210335-005 Work Order #....: EWRFJ1AA Matrix.....: WATER  
 Date Sampled....: 03/21/02 13:20 Date Received...: 03/21/02 17:53  
 Prep Date.....: 03/21/02 Analysis Date...: 03/22/02  
 Prep Batch #....: 2081279 Method.....: SW846 8260B

| PARAMETER                        | REPORTING |       |       |
|----------------------------------|-----------|-------|-------|
|                                  | RESULT    | LIMIT | UNITS |
| Acetone                          | ND        | 10    | ug/L  |
| Benzene                          | ND        | 1.0   | ug/L  |
| Bromobenzene                     | ND        | 1.0   | ug/L  |
| Bromochloromethane               | ND        | 1.0   | ug/L  |
| Bromoform                        | ND        | 1.0   | ug/L  |
| Bromomethane                     | ND        | 2.0   | ug/L  |
| Carbon tetrachloride             | ND        | 0.50  | ug/L  |
| 2-Butanone                       | ND        | 5.0   | ug/L  |
| n-Butylbenzene                   | ND        | 1.0   | ug/L  |
| sec-Butylbenzene                 | ND        | 1.0   | ug/L  |
| tert-Butylbenzene                | ND        | 1.0   | ug/L  |
| Carbon disulfide                 | ND        | 1.0   | ug/L  |
| Chlorobenzene                    | ND        | 1.0   | ug/L  |
| Dibromochloromethane             | ND        | 1.0   | ug/L  |
| Dichlorodifluoromethane          | 1.7       | 1.0   | ug/L  |
| Bromodichloromethane             | ND        | 1.0   | ug/L  |
| 1,2-Dichloroethane               | ND        | 0.50  | ug/L  |
| Chloroethane                     | ND        | 2.0   | ug/L  |
| Chloroform                       | 3.0       | 1.0   | ug/L  |
| Chloromethane                    | ND        | 2.0   | ug/L  |
| 2-Chlorotoluene                  | ND        | 1.0   | ug/L  |
| 4-Chlorotoluene                  | ND        | 1.0   | ug/L  |
| 1,2-Dibromo-3-chloro-<br>propane | ND        | 2.0   | ug/L  |
| 1,2-Dibromoethane                | ND        | 1.0   | ug/L  |
| Iodomethane                      | ND        | 2.0   | ug/L  |
| 1,2-Dichlorobenzene              | ND        | 1.0   | ug/L  |
| 1,3-Dichlorobenzene              | ND        | 1.0   | ug/L  |
| 1,4-Dichlorobenzene              | ND        | 1.0   | ug/L  |
| 1,1-Dichloroethane               | ND        | 1.0   | ug/L  |
| cis-1,2-Dichloroethene           | ND        | 1.0   | ug/L  |
| trans-1,2-Dichloroethene         | ND        | 1.0   | ug/L  |
| Vinyl chloride                   | ND        | 0.50  | ug/L  |
| 2,2-Dichloropropane              | ND        | 1.0   | ug/L  |
| 1,1-Dichloropropene              | ND        | 1.0   | ug/L  |
| Ethylbenzene                     | ND        | 1.0   | ug/L  |
| Hexachlorobutadiene              | ND        | 1.0   | ug/L  |
| 2-Hexanone                       | ND        | 5.0   | ug/L  |
| Isopropylbenzene                 | ND        | 1.0   | ug/L  |
| p-Isopropyltoluene               | ND        | 1.0   | ug/L  |

(Continued on next page)

000017

## TAIT ENVIRONMENTAL

Client Sample ID: TMW\_10\_032102\_1320

## GC/MS Volatiles

Lot-Sample #...: E2C210335-005 Work Order #...: EWRFJ1AA Matrix.....: WATER

| <u>PARAMETER</u>                    | <u>RESULT</u>               | <u>REPORTING</u>           |              |
|-------------------------------------|-----------------------------|----------------------------|--------------|
|                                     |                             | <u>LIMIT</u>               | <u>UNITS</u> |
| Methylene chloride                  | ND                          | 1.0                        | ug/L         |
| 4-Methyl-2-pentanone                | ND                          | 5.0                        | ug/L         |
| Methyl tert-butyl ether             | ND                          | 1.0                        | ug/L         |
| n-Propylbenzene                     | ND                          | 1.0                        | ug/L         |
| Styrene                             | ND                          | 1.0                        | ug/L         |
| 1,1,1,2-Tetrachloroethane           | ND                          | 1.0                        | ug/L         |
| 1,1,2,2-Tetrachloroethane           | ND                          | 1.0                        | ug/L         |
| Tetrachloroethene                   | 0.88 J                      | 1.0                        | ug/L         |
| Toluene                             | 5.5                         | 1.0                        | ug/L         |
| 1,2,3-Trichlorobenzene              | ND                          | 1.0                        | ug/L         |
| 1,2,4-Trichloro-<br>benzene         | ND                          | 1.0                        | ug/L         |
| 1,1,1-Trichloroethane               | ND                          | 1.0                        | ug/L         |
| 1,1,2-Trichloroethane               | ND                          | 1.0                        | ug/L         |
| Trichloroethene                     | 3.7                         | 1.0                        | ug/L         |
| Trichlorofluoromethane              | 1.2 J                       | 2.0                        | ug/L         |
| 1,2,3-Trichloropropane              | ND                          | 1.0                        | ug/L         |
| 1,1,2-Trichlorotrifluoro-<br>ethane | ND                          | 1.0                        | ug/L         |
| 1,2,4-Trimethylbenzene              | ND                          | 1.0                        | ug/L         |
| 1,3,5-Trimethylbenzene              | ND                          | 1.0                        | ug/L         |
| Xylenes (total)                     | ND                          | 1.0                        | ug/L         |
| Acrolein                            | ND                          | 20                         | ug/L         |
| Acrylonitrile                       | ND                          | 20                         | ug/L         |
| Vinyl acetate                       | ND                          | 5.0                        | ug/L         |
| Tetrahydrofuran                     | ND                          | 10                         | ug/L         |
| 2-Chloroethyl vinyl ether           | ND                          | 5.0                        | ug/L         |
| 1,1-Dichloroethene                  | ND                          | 1.0                        | ug/L         |
| <u>SURROGATE</u>                    | <u>PERCENT<br/>RECOVERY</u> | <u>RECOVERY<br/>LIMITS</u> |              |
|                                     |                             | (75 - 130)                 |              |
| Bromofluorobenzene                  | 104                         | (75 - 130)                 |              |
| 1,2-Dichloroethane-d4               | 104                         | (65 - 135)                 |              |
| Toluene-d8                          | 100                         | (80 - 130)                 |              |

NOTE(S) :

J Estimated result. Result is less than RL.

000018

## TAIT ENVIRONMENTAL

Client Sample ID: WCC\_3D\_032102\_1605

## GC/MS Volatiles

Lot-Sample #....: E2C210335-006 Work Order #....: EWRFK1AA Matrix.....: WATER  
 Date Sampled....: 03/21/02 16:05 Date Received...: 03/21/02 17:53  
 Prep Date.....: 03/21/02 Analysis Date...: 03/22/02  
 Prep Batch #....: 2081279 Method.....: SW846 8260B

| PARAMETER                | REPORTING |       |       |
|--------------------------|-----------|-------|-------|
|                          | RESULT    | LIMIT | UNITS |
| Acetone                  | 7.1 J     | 10    | ug/L  |
| Benzene                  | ND        | 1.0   | ug/L  |
| Bromobenzene             | ND        | 1.0   | ug/L  |
| Bromoform                | ND        | 1.0   | ug/L  |
| Bromomethane             | ND        | 2.0   | ug/L  |
| Carbon tetrachloride     | ND        | 0.50  | ug/L  |
| 2-Butanone               | ND        | 5.0   | ug/L  |
| n-Butylbenzene           | ND        | 1.0   | ug/L  |
| sec-Butylbenzene         | ND        | 1.0   | ug/L  |
| tert-Butylbenzene        | ND        | 1.0   | ug/L  |
| Carbon disulfide         | ND        | 1.0   | ug/L  |
| Chlorobenzene            | ND        | 1.0   | ug/L  |
| Dibromochloromethane     | ND        | 1.0   | ug/L  |
| Dichlorodifluoromethane  | ND        | 1.0   | ug/L  |
| Bromodichloromethane     | ND        | 1.0   | ug/L  |
| 1,2-Dichloroethane       | ND        | 0.50  | ug/L  |
| Chloroethane             | ND        | 2.0   | ug/L  |
| Chloroform               | ND        | 1.0   | ug/L  |
| Chloromethane            | ND        | 2.0   | ug/L  |
| 2-Chlorotoluene          | ND        | 1.0   | ug/L  |
| 4-Chlorotoluene          | ND        | 1.0   | ug/L  |
| 1,2-Dibromo-3-chloro-    | ND        | 2.0   | ug/L  |
| propane                  |           |       |       |
| 1,2-Dibromoethane        | ND        | 1.0   | ug/L  |
| Iodomethane              | ND        | 2.0   | ug/L  |
| 1,2-Dichlorobenzene      | ND        | 1.0   | ug/L  |
| 1,3-Dichlorobenzene      | ND        | 1.0   | ug/L  |
| 1,4-Dichlorobenzene      | ND        | 1.0   | ug/L  |
| 1,1-Dichloroethane       | ND        | 1.0   | ug/L  |
| cis-1,2-Dichloroethene   | 1.7       | 1.0   | ug/L  |
| trans-1,2-Dichloroethene | ND        | 1.0   | ug/L  |
| Vinyl chloride           | ND        | 0.50  | ug/L  |
| 2,2-Dichloropropane      | ND        | 1.0   | ug/L  |
| 1,1-Dichloropropene      | ND        | 1.0   | ug/L  |
| Ethylbenzene             | ND        | 1.0   | ug/L  |
| Hexachlorobutadiene      | ND        | 1.0   | ug/L  |
| 2-Hexanone               | ND        | 5.0   | ug/L  |
| Isopropylbenzene         | ND        | 1.0   | ug/L  |
| p-Isopropyltoluene       | ND        | 1.0   | ug/L  |

(Continued on next page)

000019

## TAIT ENVIRONMENTAL

Client Sample ID: WCC\_3D\_032102\_1605

## GC/MS Volatiles

Lot-Sample #....: E2C210335-006 Work Order #....: EWRFK1AA Matrix.....: WATER

| <u>PARAMETER</u>                    | <u>RESULT</u>               | <u>REPORTING</u>           |              |
|-------------------------------------|-----------------------------|----------------------------|--------------|
|                                     |                             | <u>LIMIT</u>               | <u>UNITS</u> |
| Methylene chloride                  | ND                          | 1.0                        | ug/L         |
| 4-Methyl-2-pentanone                | ND                          | 5.0                        | ug/L         |
| Methyl tert-butyl ether             | ND                          | 1.0                        | ug/L         |
| n-Propylbenzene                     | ND                          | 1.0                        | ug/L         |
| Styrene                             | ND                          | 1.0                        | ug/L         |
| 1,1,1,2-Tetrachloroethane           | ND                          | 1.0                        | ug/L         |
| 1,1,2,2-Tetrachloroethane           | ND                          | 1.0                        | ug/L         |
| Tetrachloroethene                   | ND                          | 1.0                        | ug/L         |
| Toluene                             | 3.0                         | 1.0                        | ug/L         |
| 1,2,3-Trichlorobenzene              | ND                          | 1.0                        | ug/L         |
| 1,2,4-Trichloro-<br>benzene         | ND                          | 1.0                        | ug/L         |
| 1,1,1-Trichloroethane               | 6.7                         | 1.0                        | ug/L         |
| 1,1,2-Trichloroethane               | ND                          | 1.0                        | ug/L         |
| Trichloroethene                     | 1.8                         | 1.0                        | ug/L         |
| Trichlorofluoromethane              | ND                          | 2.0                        | ug/L         |
| 1,2,3-Trichloropropane              | ND                          | 1.0                        | ug/L         |
| 1,1,2-Trichlorotrifluoro-<br>ethane | ND                          | 1.0                        | ug/L         |
| 1,2,4-Trimethylbenzene              | ND                          | 1.0                        | ug/L         |
| 1,3,5-Trimethylbenzene              | ND                          | 1.0                        | ug/L         |
| Xylenes (total)                     | ND                          | 1.0                        | ug/L         |
| Acrolein                            | ND                          | 20                         | ug/L         |
| Acrylonitrile                       | ND                          | 20                         | ug/L         |
| Vinyl acetate                       | ND                          | 5.0                        | ug/L         |
| Tetrahydrofuran                     | ND                          | 10                         | ug/L         |
| 2-Chloroethyl vinyl ether           | ND                          | 5.0                        | ug/L         |
| 1,1-Dichloroethene                  | 8.7                         | 1.0                        | ug/L         |
| <u>SURROGATE</u>                    | <u>PERCENT<br/>RECOVERY</u> | <u>RECOVERY<br/>LIMITS</u> |              |
|                                     |                             | (75 - 130)                 |              |
| Bromofluorobenzene                  | 105                         | (65 - 135)                 |              |
| 1,2-Dichloroethane-d4               | 103                         | (80 - 130)                 |              |
| Toluene-d8                          | 100                         |                            |              |

NOTE(S) :

J Estimated result. Result is less than RL.

000020

## TAIT ENVIRONMENTAL

Client Sample ID: TB\_TAIT032102\_0001

## GC/MS Volatiles

Lot-Sample #....: E2C210335-007      Work Order #....: EWRFL1AA      Matrix.....: WATER  
 Date Sampled....: 03/21/02      Date Received...: 03/21/02 17:53  
 Prep Date.....: 03/21/02      Analysis Date...: 03/22/02  
 Prep Batch #....: 2081279      Method.....: SW846 8260B

| PARAMETER                | REPORTING |       |       |
|--------------------------|-----------|-------|-------|
|                          | RESULT    | LIMIT | UNITS |
| Acetone                  | 7.2 J     | 10    | ug/L  |
| Benzene                  | ND        | 1.0   | ug/L  |
| Bromobenzene             | ND        | 1.0   | ug/L  |
| Bromochloromethane       | ND        | 1.0   | ug/L  |
| Bromoform                | ND        | 1.0   | ug/L  |
| Bromomethane             | ND        | 2.0   | ug/L  |
| Carbon tetrachloride     | ND        | 0.50  | ug/L  |
| 2-Butanone               | ND        | 5.0   | ug/L  |
| n-Butylbenzene           | ND        | 1.0   | ug/L  |
| sec-Butylbenzene         | ND        | 1.0   | ug/L  |
| tert-Butylbenzene        | ND        | 1.0   | ug/L  |
| Carbon disulfide         | ND        | 1.0   | ug/L  |
| Chlorobenzene            | ND        | 1.0   | ug/L  |
| Dibromochloromethane     | ND        | 1.0   | ug/L  |
| Dichlorodifluoromethane  | ND        | 1.0   | ug/L  |
| Bromodichloromethane     | ND        | 1.0   | ug/L  |
| 1,2-Dichloroethane       | ND        | 0.50  | ug/L  |
| Chloroethane             | ND        | 2.0   | ug/L  |
| Chloroform               | ND        | 1.0   | ug/L  |
| Chloromethane            | ND        | 2.0   | ug/L  |
| 2-Chlorotoluene          | ND        | 1.0   | ug/L  |
| 4-Chlorotoluene          | ND        | 1.0   | ug/L  |
| 1,2-Dibromo-3-chloro-    | ND        | 2.0   | ug/L  |
| propane                  |           |       |       |
| 1,2-Dibromoethane        | ND        | 1.0   | ug/L  |
| Iodomethane              | ND        | 2.0   | ug/L  |
| 1,2-Dichlorobenzene      | ND        | 1.0   | ug/L  |
| 1,3-Dichlorobenzene      | ND        | 1.0   | ug/L  |
| 1,4-Dichlorobenzene      | ND        | 1.0   | ug/L  |
| 1,1-Dichloroethane       | ND        | 1.0   | ug/L  |
| cis-1,2-Dichloroethene   | ND        | 1.0   | ug/L  |
| trans-1,2-Dichloroethene | ND        | 1.0   | ug/L  |
| Vinyl chloride           | ND        | 0.50  | ug/L  |
| 2,2-Dichloropropane      | ND        | 1.0   | ug/L  |
| 1,1-Dichloropropene      | ND        | 1.0   | ug/L  |
| Ethylbenzene             | ND        | 1.0   | ug/L  |
| Hexachlorobutadiene      | ND        | 1.0   | ug/L  |
| 2-Hexanone               | ND        | 5.0   | ug/L  |
| Isopropylbenzene         | ND        | 1.0   | ug/L  |
| p-Isopropyltoluene       | ND        | 1.0   | ug/L  |

(Continued on next page)

000021

## TAIT ENVIRONMENTAL

Client Sample ID: TB\_TAIT032102\_0001

## GC/MS Volatiles

Lot-Sample #....: E2C210335-007 Work Order #....: EWRFL1AA Matrix.....: WATER

| <u>PARAMETER</u>          | <u>RESULT</u>  | <u>REPORTING</u> |               |
|---------------------------|----------------|------------------|---------------|
|                           |                | <u>LIMIT</u>     | <u>UNITS</u>  |
| Methylene chloride        | ND             | 1.0              | ug/L          |
| 4-Methyl-2-pentanone      | ND             | 5.0              | ug/L          |
| Methyl tert-butyl ether   | ND             | 1.0              | ug/L          |
| n-Propylbenzene           | ND             | 1.0              | ug/L          |
| Styrene                   | ND             | 1.0              | ug/L          |
| 1,1,1,2-Tetrachloroethane | ND             | 1.0              | ug/L          |
| 1,1,2,2-Tetrachloroethane | ND             | 1.0              | ug/L          |
| Tetrachloroethene         | ND             | 1.0              | ug/L          |
| Toluene                   | ND             | 1.0              | ug/L          |
| 1,2,3-Trichlorobenzene    | ND             | 1.0              | ug/L          |
| 1,2,4-Trichloro-          | ND             | 1.0              | ug/L          |
| benzene                   |                |                  |               |
| 1,1,1-Trichloroethane     | ND             | 1.0              | ug/L          |
| 1,1,2-Trichloroethane     | ND             | 1.0              | ug/L          |
| Trichloroethene           | ND             | 1.0              | ug/L          |
| Trichlorofluoromethane    | ND             | 2.0              | ug/L          |
| 1,2,3-Trichloropropane    | ND             | 1.0              | ug/L          |
| 1,1,2-Trichlorotrifluoro- | ND             | 1.0              | ug/L          |
| ethane                    |                |                  |               |
| 1,2,4-Trimethylbenzene    | ND             | 1.0              | ug/L          |
| 1,3,5-Trimethylbenzene    | ND             | 1.0              | ug/L          |
| Xylenes (total)           | ND             | 1.0              | ug/L          |
| Acrolein                  | ND             | 20               | ug/L          |
| Acrylonitrile             | ND             | 20               | ug/L          |
| Vinyl acetate             | ND             | 5.0              | ug/L          |
| Tetrahydrofuran           | ND             | 10               | ug/L          |
| 2-Chloroethyl vinyl ether | ND             | 5.0              | ug/L          |
| 1,1-Dichloroethene        | ND             | 1.0              | ug/L          |
| <u>SURROGATE</u>          | <u>PERCENT</u> | <u>RECOVERY</u>  |               |
|                           |                | <u>RECOVERY</u>  | <u>LIMITS</u> |
| Bromofluorobenzene        | 102            | (75 - 130)       |               |
| 1,2-Dichloroethane-d4     | 102            | (65 - 135)       |               |
| Toluene-d8                | 99             | (80 - 130)       |               |

NOTE(S) :

J Estimated result. Result is less than RL.

000022

SEVERN  
TRENT  
SERVICES

# QA/QC

**000023**

# QC DATA ASSOCIATION SUMMARY

E2C210335

## Sample Preparation and Analysis Control Numbers

| <u>SAMPLE#</u> | <u>MATRIX</u> | <u>ANALYTICAL<br/>METHOD</u> | <u>LEACH<br/>BATCH #</u> | <u>PREP<br/>BATCH #</u> | <u>MS RUN#</u> |
|----------------|---------------|------------------------------|--------------------------|-------------------------|----------------|
| 001            | WATER         | SW846 8260B                  |                          | 2081279                 | 2081135        |
| 002            | WATER         | SW846 8260B                  |                          | 2081279                 | 2081135        |
| 003            | WATER         | SW846 8260B                  |                          | 2081279                 | 2081135        |
| 004            | WATER         | SW846 8260B                  |                          | 2081279                 | 2081135        |
| 005            | WATER         | SW846 8260B                  |                          | 2081279                 | 2081135        |
| 006            | WATER         | SW846 8260B                  |                          | 2081279                 | 2081135        |
| 007            | WATER         | SW846 8260B                  |                          | 2081279                 | 2081135        |

000024

## METHOD BLANK REPORT

## GC/MS Volatiles

Client Lot #....: E2C210335  
 MB Lot-Sample #: E2C220000-279  
 Analysis Date..: 03/21/02

Work Order #....: EWR6L1AA  
 Prep Date.....: 03/21/02  
 Prep Batch #....: 2081279

Matrix.....: WATER

| PARAMETER                    | RESULT | REPORTING |       |             |
|------------------------------|--------|-----------|-------|-------------|
|                              |        | LIMIT     | UNITS | METHOD      |
| Acetone                      | ND     | 10        | ug/L  | SW846 8260B |
| Benzene                      | ND     | 1.0       | ug/L  | SW846 8260B |
| Bromobenzene                 | ND     | 1.0       | ug/L  | SW846 8260B |
| Bromoform                    | ND     | 1.0       | ug/L  | SW846 8260B |
| Bromomethane                 | ND     | 2.0       | ug/L  | SW846 8260B |
| Carbon tetrachloride         | ND     | 0.50      | ug/L  | SW846 8260B |
| 2-Butanone                   | ND     | 5.0       | ug/L  | SW846 8260B |
| n-Butylbenzene               | ND     | 1.0       | ug/L  | SW846 8260B |
| sec-Butylbenzene             | ND     | 1.0       | ug/L  | SW846 8260B |
| tert-Butylbenzene            | ND     | 1.0       | ug/L  | SW846 8260B |
| Carbon disulfide             | ND     | 1.0       | ug/L  | SW846 8260B |
| Chlorobenzene                | ND     | 1.0       | ug/L  | SW846 8260B |
| Dibromochloromethane         | ND     | 1.0       | ug/L  | SW846 8260B |
| Dichlorodifluoromethane      | ND     | 1.0       | ug/L  | SW846 8260B |
| Bromodichloromethane         | ND     | 1.0       | ug/L  | SW846 8260B |
| 1,2-Dichloroethane           | ND     | 0.50      | ug/L  | SW846 8260B |
| Chloroethane                 | ND     | 2.0       | ug/L  | SW846 8260B |
| Chloroform                   | ND     | 1.0       | ug/L  | SW846 8260B |
| Chloromethane                | ND     | 2.0       | ug/L  | SW846 8260B |
| 2-Chlorotoluene              | ND     | 1.0       | ug/L  | SW846 8260B |
| 4-Chlorotoluene              | ND     | 1.0       | ug/L  | SW846 8260B |
| 1,2-Dibromo-3-chloro-propane | ND     | 2.0       | ug/L  | SW846 8260B |
| 1,2-Dibromoethane            | ND     | 1.0       | ug/L  | SW846 8260B |
| Iodomethane                  | ND     | 2.0       | ug/L  | SW846 8260B |
| 1,2-Dichlorobenzene          | ND     | 1.0       | ug/L  | SW846 8260B |
| 1,3-Dichlorobenzene          | ND     | 1.0       | ug/L  | SW846 8260B |
| 1,4-Dichlorobenzene          | ND     | 1.0       | ug/L  | SW846 8260B |
| 1,1-Dichloroethane           | ND     | 1.0       | ug/L  | SW846 8260B |
| cis-1,2-Dichloroethene       | ND     | 1.0       | ug/L  | SW846 8260B |
| trans-1,2-Dichloroethene     | ND     | 1.0       | ug/L  | SW846 8260B |
| Vinyl chloride               | ND     | 0.50      | ug/L  | SW846 8260B |
| 2,2-Dichloropropane          | ND     | 1.0       | ug/L  | SW846 8260B |
| 1,1-Dichloropropene          | ND     | 1.0       | ug/L  | SW846 8260B |
| Ethylbenzene                 | ND     | 1.0       | ug/L  | SW846 8260B |
| Hexachlorobutadiene          | ND     | 1.0       | ug/L  | SW846 8260B |
| 2-Hexanone                   | ND     | 5.0       | ug/L  | SW846 8260B |
| Isopropylbenzene             | ND     | 1.0       | ug/L  | SW846 8260B |
| p-Isopropyltoluene           | ND     | 1.0       | ug/L  | SW846 8260B |
| Methylene chloride           | ND     | 1.0       | ug/L  | SW846 8260B |
| 4-Methyl-2-pentanone         | ND     | 5.0       | ug/L  | SW846 8260B |

(Continued on next page)

000025

## METHOD BLANK REPORT

## GC/MS Volatiles

Client Lot #....: E2C210335

Work Order #....: EWR6L1AA

Matrix.....: WATER

| <u>PARAMETER</u>                    | <u>RESULT</u> | REPORTING       |                 |               |
|-------------------------------------|---------------|-----------------|-----------------|---------------|
|                                     |               | <u>LIMIT</u>    | <u>UNITS</u>    | <u>METHOD</u> |
| Methyl tert-butyl ether             | ND            | 1.0             | ug/L            | SW846 8260B   |
| n-Propylbenzene                     | ND            | 1.0             | ug/L            | SW846 8260B   |
| Styrene                             | ND            | 1.0             | ug/L            | SW846 8260B   |
| 1,1,1,2-Tetrachloroethane           | ND            | 1.0             | ug/L            | SW846 8260B   |
| 1,1,2,2-Tetrachloroethane           | ND            | 1.0             | ug/L            | SW846 8260B   |
| Tetrachloroethene                   | ND            | 1.0             | ug/L            | SW846 8260B   |
| Toluene                             | ND            | 1.0             | ug/L            | SW846 8260B   |
| 1,2,3-Trichlorobenzene              | ND            | 1.0             | ug/L            | SW846 8260B   |
| 1,2,4-Trichloro-<br>benzene         | ND            | 1.0             | ug/L            | SW846 8260B   |
| 1,1,1-Trichloroethane               | ND            | 1.0             | ug/L            | SW846 8260B   |
| 1,1,2-Trichloroethane               | ND            | 1.0             | ug/L            | SW846 8260B   |
| Trichloroethene                     | ND            | 1.0             | ug/L            | SW846 8260B   |
| Trichlorofluoromethane              | ND            | 2.0             | ug/L            | SW846 8260B   |
| 1,2,3-Trichloropropane              | ND            | 1.0             | ug/L            | SW846 8260B   |
| 1,1,2-Trichlorotrifluoro-<br>ethane | ND            | 1.0             | ug/L            | SW846 8260B   |
| 1,2,4-Trimethylbenzene              | ND            | 1.0             | ug/L            | SW846 8260B   |
| 1,3,5-Trimethylbenzene              | ND            | 1.0             | ug/L            | SW846 8260B   |
| Xylenes (total)                     | ND            | 1.0             | ug/L            | SW846 8260B   |
| Acrolein                            | ND            | 20              | ug/L            | SW846 8260B   |
| Acrylonitrile                       | ND            | 20              | ug/L            | SW846 8260B   |
| Vinyl acetate                       | ND            | 5.0             | ug/L            | SW846 8260B   |
| Tetrahydrofuran                     | ND            | 10              | ug/L            | SW846 8260B   |
| 2-Chloroethyl vinyl ether           | ND            | 5.0             | ug/L            | SW846 8260B   |
| 1,1-Dichloroethene                  | ND            | 1.0             | ug/L            | SW846 8260B   |
| <u>SURROGATE</u>                    |               | <u>PERCENT</u>  | <u>RECOVERY</u> |               |
|                                     |               | <u>RECOVERY</u> | <u>LIMITS</u>   |               |
| Bromofluorobenzene                  | 103           |                 | (75 - 130)      |               |
| 1,2-Dichloroethane-d4               | 94            |                 | (65 - 135)      |               |
| Toluene-d8                          | 102           |                 | (80 - 130)      |               |

NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

000026

## LABORATORY CONTROL SAMPLE EVALUATION REPORT

## GC/MS Volatiles

**Client Lot #....:** E2C210335      **Work Order #....:** EWR6L1AC      **Matrix.....:** WATER  
**LCS Lot-Sample#:** E2C220000-279  
**Prep Date.....:** 03/21/02      **Analysis Date...:** 03/21/02  
**Prep Batch #....:** 2081279

| <u>PARAMETER</u>   | <u>PERCENT</u>  | <u>RECOVERY</u> | <u>METHOD</u> |
|--------------------|-----------------|-----------------|---------------|
|                    | <u>RECOVERY</u> | <u>LIMITS</u>   |               |
| Benzene            | 109             | (75 - 120)      | SW846 8260B   |
| Chlorobenzene      | 108             | (75 - 120)      | SW846 8260B   |
| Toluene            | 111             | (75 - 125)      | SW846 8260B   |
| Trichloroethene    | 105             | (70 - 130)      | SW846 8260B   |
| 1,1-Dichloroethene | 104             | (70 - 140)      | SW846 8260B   |

| <u>SURROGATE</u>      | <u>PERCENT</u>  | <u>RECOVERY</u> |
|-----------------------|-----------------|-----------------|
|                       | <u>RECOVERY</u> | <u>LIMITS</u>   |
| Bromofluorobenzene    | 106             | (75 - 130)      |
| 1,2-Dichloroethane-d4 | 92              | (65 - 135)      |
| Toluene-d8            | 108             | (80 - 130)      |

NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

000027

## LABORATORY CONTROL SAMPLE DATA REPORT

## GC/MS Volatiles

Client Lot #....: E2C210335      Work Order #....: EWR6L1AC      Matrix.....: WATER  
 LCS Lot-Sample#: E2C220000-279  
 Prep Date.....: 03/21/02      Analysis Date...: 03/21/02  
 Prep Batch #....: 2081279

| <u>PARAMETER</u>   | <u>SPIKE</u>  | <u>MEASURED</u> | <u>UNITS</u> | <u>PERCENT</u>  | <u>METHOD</u> |
|--------------------|---------------|-----------------|--------------|-----------------|---------------|
|                    | <u>AMOUNT</u> | <u>AMOUNT</u>   |              | <u>RECOVERY</u> |               |
| Benzene            | 10.0          | 10.9            | ug/L         | 109             | SW846 8260B   |
| Chlorobenzene      | 10.0          | 10.8            | ug/L         | 108             | SW846 8260B   |
| Toluene            | 10.0          | 11.1            | ug/L         | 111             | SW846 8260B   |
| Trichloroethene    | 10.0          | 10.5            | ug/L         | 105             | SW846 8260B   |
| 1,1-Dichloroethene | 10.0          | 10.4            | ug/L         | 104             | SW846 8260B   |

| <u>SURROGATE</u>      | <u>PERCENT</u>  | <u>RECOVERY</u> |
|-----------------------|-----------------|-----------------|
|                       | <u>RECOVERY</u> | <u>LIMITS</u>   |
| Bromofluorobenzene    | 106             | (75 - 130)      |
| 1,2-Dichloroethane-d4 | 92              | (65 - 135)      |
| Toluene-d8            | 108             | (80 - 130)      |

NOTE (S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

000028

## MATRIX SPIKE SAMPLE EVALUATION REPORT

## GC/MS Volatiles

Client Lot #....: E2C210335      Work Order #....: EWRFT1AD-MS      Matrix.....: WATER  
 MS Lot-Sample #: E2C210336-004      EWRFT1AE-MSD  
 Date Sampled...: 03/21/02 11:15 Date Received...: 03/21/02 20:00  
 Prep Date.....: 03/21/02      Analysis Date...: 03/22/02  
 Prep Batch #....: 2081279

| <u>PARAMETER</u>             | <u>PERCENT</u><br><u>RECOVERY</u> | <u>RECOVERY</u><br><u>LIMITS</u> | <u>RPD</u> | <u>RPD</u><br><u>LIMITS</u> | <u>METHOD</u> |
|------------------------------|-----------------------------------|----------------------------------|------------|-----------------------------|---------------|
| <b>Benzene</b>               | 103                               | (75 - 120)                       | 2.5        | (0-25)                      | SW846 8260B   |
|                              | 106                               | (75 - 120)                       |            |                             | SW846 8260B   |
| <b>Chlorobenzene</b>         | 103                               | (75 - 120)                       | 2.4        | (0-25)                      | SW846 8260B   |
|                              | 106                               | (75 - 120)                       |            |                             | SW846 8260B   |
| <b>Toluene</b>               | 103                               | (75 - 125)                       | 4.3        | (0-25)                      | SW846 8260B   |
|                              | 107                               | (75 - 125)                       |            |                             | SW846 8260B   |
| <b>Trichloroethene</b>       | 102                               | (70 - 130)                       | 0.99       | (0-25)                      | SW846 8260B   |
|                              | 100                               | (70 - 130)                       |            |                             | SW846 8260B   |
| <b>1,1-Dichloroethene</b>    | 98                                | (70 - 140)                       | 1.4        | (0-25)                      | SW846 8260B   |
|                              | 99                                | (70 - 140)                       |            |                             | SW846 8260B   |
| <u>SURROGATE</u>             | <u>PERCENT</u><br><u>RECOVERY</u> | <u>RECOVERY</u><br><u>LIMITS</u> |            |                             |               |
| <b>Bromofluorobenzene</b>    | 108                               | (75 - 130)                       |            |                             |               |
|                              | 106                               | (75 - 130)                       |            |                             |               |
| <b>1,2-Dichloroethane-d4</b> | 109                               | (65 - 135)                       |            |                             |               |
|                              | 104                               | (65 - 135)                       |            |                             |               |
| <b>Toluene-d8</b>            | 104                               | (80 - 130)                       |            |                             |               |
|                              | 106                               | (80 - 130)                       |            |                             |               |

NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

000029

## MATRIX SPIKE SAMPLE DATA REPORT

## GC/MS Volatiles

Client Lot #...: E2C210335      Work Order #...: EWRFT1AD-MS      Matrix.....: WATER  
 MS Lot-Sample #: E2C210336-004      EWRFT1AE-MSD  
 Date Sampled...: 03/21/02 11:15 Date Received...: 03/21/02 20:00  
 Prep Date.....: 03/21/02      Analysis Date...: 03/22/02  
 Prep Batch #...: 2081279

| <u>PARAMETER</u>   | <u>SAMPLE</u> | <u>SPIKE</u> | <u>MEASRD</u> | <u>PERCNT</u> |               |            | <u>METHOD</u> |
|--------------------|---------------|--------------|---------------|---------------|---------------|------------|---------------|
|                    | <u>AMOUNT</u> | <u>AMT</u>   | <u>AMOUNT</u> | <u>UNITS</u>  | <u>RECVRY</u> | <u>RPD</u> |               |
| Benzene            | ND            | 10.0         | 10.3          | ug/L          | 103           |            | SW846 8260B   |
|                    | ND            | 10.0         | 10.6          | ug/L          | 106           | 2.5        | SW846 8260B   |
| Chlorobenzene      | ND            | 10.0         | 10.3          | ug/L          | 103           |            | SW846 8260B   |
|                    | ND            | 10.0         | 10.6          | ug/L          | 106           | 2.4        | SW846 8260B   |
| Toluene            | ND            | 10.0         | 10.3          | ug/L          | 103           |            | SW846 8260B   |
|                    | ND            | 10.0         | 10.7          | ug/L          | 107           | 4.3        | SW846 8260B   |
| Trichloroethene    | ND            | 10.0         | 10.2          | ug/L          | 102           |            | SW846 8260B   |
|                    | ND            | 10.0         | 10.0          | ug/L          | 100           | 0.99       | SW846 8260B   |
| 1,1-Dichloroethene | ND            | 10.0         | 9.75          | ug/L          | 98            |            | SW846 8260B   |
|                    | ND            | 10.0         | 9.89          | ug/L          | 99            | 1.4        | SW846 8260B   |

| <u>SURROGATE</u>      | <u>PERCENT</u>  | <u>RECOVERY</u> | <u>LIMITS</u> |
|-----------------------|-----------------|-----------------|---------------|
|                       | <u>RECOVERY</u> |                 |               |
| Bromofluorobenzene    | 108             |                 | (75 - 130)    |
|                       | 106             |                 | (75 - 130)    |
| 1,2-Dichloroethane-d4 | 109             |                 | (65 - 135)    |
|                       | 104             |                 | (65 - 135)    |
| Toluene-d8            | 104             |                 | (80 - 130)    |
|                       | 106             |                 | (80 - 130)    |

NOTE (S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

000030

SEVERN  
TRENT  
SERVICES

June 12, 2002

STL LOT NUMBER: E2F010157  
NELAP Certification Number: 01118CA  
PO/CONTRACT: 05160-SEV002-S56

Scott Zachary  
Haley & Aldrich Inc  
9040 Friars Road  
Suite 220  
San Diego, CA 92108

STL Los Angeles  
1721 South Grand Avenue  
Santa Ana, CA 92705-4808

Tel: 714 258 8610  
Fax: 714 258 0921  
[www.stl-inc.com](http://www.stl-inc.com)

Dear Mr. Zachary,

This report contains the analytical results for the four samples received under chain of custody by STL Los Angeles on June 1, 2002. These samples are associated with your BRC former C-6 facility, Torrance, California project.

All applicable quality control procedures met method-specified acceptance criteria. See Project Receipt Checklist for container temperature and conditions. Temperature reading between 2 to 6 degrees Celsius is considered within acceptable criteria. Any matrix related anomaly is footnoted within the report. The PAH by 8310 analysis was performed by Del Mar Analytical. Please see attached report for any related anomaly.

STL Los Angeles certifies that the tests performed at our facility meet all NELAP requirements for parameters for which accreditation is required or available. The case narrative is an integral part of the report. This report shall not be reproduced except in full, without the written approval of the laboratory.

If you have any questions, please feel free to call me at (714) 258-8610 extension 309.

Sincerely,



Diane Suzuki  
Project Manager

CC: Project File

**000094**  
Page 1 of \_\_\_\_\_ total pages in this report.

**000001**

STL Los Angeles is a part of Severn Trent Laboratories, Inc.





2601 Saturn Street, Suite 101  
Brea, CA 92821  
(714) 985-3434 Fax (714) 985-3433

## **CHAIN OF CUSTODY FORM**

No 0704

E2F010157

**STL LOS ANGELES  
PROJECT RECEIPT CHECKLIST**

Date: 6/01/02

Quantims Lot #: EZ7 010157  
Client Name: Haley & Nichols  
Received by: B. Colf  
Delivered by:  Client  Airborne  Fed  
 UPS  DES  Other

Quote #: 42295  
Project: Boeing C-6  
Date/Time Received: 6/01/02 12:16  
 DHL       In-House Courier       Rev B.

Initial / Date

Custody Seal Status:  Intact  Broken  None ..... 06/01/02  
 Custody Seal #: \_\_\_\_\_  No Seal # .....  
 Sample Container(s):  STL-LA  Client  N/A .....  
 Temperature(s) (Cooler/blank) in °C: 5.6 Correction factor -0.16 (Corrected Temp.) 5.5°C  
 Thermometer Used : ID: B  IR (Infra-red)  Digital (Probe) .....  
 Samples:  Intact  Broken  Other .....  
 Anomalies:  No  Yes (See Clouseau) .....  
 Labeled by DR .....  
 Labeling checked by .....  
 \*\*\*\*\*  
 Turn Around Time:  RUSH-24HR  RUSH-48HR  RUSH-72HR  NORMAL .....  
 Short-Hold Notification:  Ph  Wet Chem  Metals (Filter/Pres)  Encore  N/A ...  
 Outside Analysis(es) (Test/Lab/Date Sent Out):  
8310 to WSAE Delmar

\*\*\*\*\* LEAVE NO BLANK SPACES : USE N/A \*\*\*\*\*

na:Sodium Hydroxide znna:Zinc Acetate/Sodium Hydroxide s:H2SO4 n:HNO3 n/f:HNO3-Field filtered n/f/l:HNO3-Lab filtered  
 CGJ:Clear Glass Jar CGB:Clear Glass Bottle AGJ:Amber Glass Jar AGB:Amber Glass Bottle PB: Poly Bottle E:Encore Sampler V:VOA SL:Sleeve

\* Number of VOA's w/ Headspace present

LOGGED BY/DATE: Debra 6/01/02 REVIEWED BY/DATE: Debra 6/03/02  
PRC Ver. 8 081401 KRF QANACAG11NA/PremSample Control Form

000003

SEVERN  
TRENT  
SERVICES

# Analytical Report

**000004**

## EXECUTIVE SUMMARY - Detection Highlights

E2F010157

| <u>PARAMETER</u>                | <u>RESULT</u> | <u>REPORTING<br/>LIMIT</u> | <u>UNITS</u> | <u>ANALYTICAL<br/>METHOD</u> |
|---------------------------------|---------------|----------------------------|--------------|------------------------------|
| <b>DW_1 05/31/02 17:45 001</b>  |               |                            |              |                              |
| 1,1-Dichloroethene              | 0.84 J        | 1.0                        | ug/L         | SW846 8260B                  |
| Methyl tert-butyl ether         | 2.6           | 1.0                        | ug/L         | SW846 8260B                  |
| Acetone                         | 25            | 10                         | ug/L         | SW846 8260B                  |
| Chloroform                      | 1.5           | 1.0                        | ug/L         | SW846 8260B                  |
| 1,1,1-Trichloroethane           | 1.3           | 1.0                        | ug/L         | SW846 8260B                  |
| Trichloroethene                 | 0.55 J        | 1.0                        | ug/L         | SW846 8260B                  |
| 4-Methyl-2-pentanone            | 14            | 5.0                        | ug/L         | SW846 8260B                  |
| Toluene                         | 8.2           | 1.0                        | ug/L         | SW846 8260B                  |
| Chlorobenzene                   | 4.6           | 1.0                        | ug/L         | SW846 8260B                  |
| Xylenes (total)                 | 0.86 J        | 1.0                        | ug/L         | SW846 8260B                  |
| Bromoform                       | 0.69 J        | 1.0                        | ug/L         | SW846 8260B                  |
| <b>SP_37 05/31/02 18:15 002</b> |               |                            |              |                              |
| C20-C23                         | 2.1 J         | 10                         | mg/kg        | SW846 8015B                  |
| C24-C27                         | 2.7 J         | 10                         | mg/kg        | SW846 8015B                  |
| C28-C31                         | 3.9 J         | 10                         | mg/kg        | SW846 8015B                  |
| C32-C35                         | 11            | 10                         | mg/kg        | SW846 8015B                  |
| C36-C39                         | 7.6 J         | 10                         | mg/kg        | SW846 8015B                  |
| Total Carbon Chain Range        | 28            | 10                         | mg/kg        | SW846 8015B                  |
| Mercury                         | 0.055 B       | 0.10                       | mg/kg        | SW846 7471A                  |
| Aluminum                        | 17300         | 20.0                       | mg/kg        | SW846 6010B                  |
| Arsenic                         | 4.6           | 1.0                        | mg/kg        | SW846 6010B                  |
| Barium                          | 144 J         | 2.0                        | mg/kg        | SW846 6010B                  |
| Cadmium                         | 0.32 B,J      | 0.50                       | mg/kg        | SW846 6010B                  |
| Chromium                        | 26.0          | 1.0                        | mg/kg        | SW846 6010B                  |
| Beryllium                       | 0.55          | 0.50                       | mg/kg        | SW846 6010B                  |
| Lead                            | 5.5           | 0.50                       | mg/kg        | SW846 6010B                  |
| Selenium                        | 0.82          | 0.50                       | mg/kg        | SW846 6010B                  |
| Cobalt                          | 8.6           | 5.0                        | mg/kg        | SW846 6010B                  |
| Copper                          | 23.2          | 2.5                        | mg/kg        | SW846 6010B                  |
| Molybdenum                      | 0.77 B,J      | 4.0                        | mg/kg        | SW846 6010B                  |
| Nickel                          | 17.1          | 4.0                        | mg/kg        | SW846 6010B                  |
| Vanadium                        | 46.8          | 5.0                        | mg/kg        | SW846 6010B                  |
| Zinc                            | 57.9          | 2.0                        | mg/kg        | SW846 6010B                  |
| <b>SP_36 05/31/02 18:30 003</b> |               |                            |              |                              |
| C32-C35                         | 2.6 J         | 10                         | mg/kg        | SW846 8015B                  |
| Total Carbon Chain Range        | 2.6 J         | 10                         | mg/kg        | SW846 8015B                  |
| Mercury                         | 0.037 B       | 0.10                       | mg/kg        | SW846 7471A                  |
| Aluminum                        | 14100         | 20.0                       | mg/kg        | SW846 6010B                  |
| Arsenic                         | 4.1           | 1.0                        | mg/kg        | SW846 6010B                  |

(Continued on next page)

**000005**

# EXECUTIVE SUMMARY - Detection Highlights

E2F010157

| <u>PARAMETER</u>                | <u>RESULT</u> | <u>REPORTING<br/>LIMIT</u> | <u>UNITS</u> | <u>ANALYTICAL<br/>METHOD</u> |
|---------------------------------|---------------|----------------------------|--------------|------------------------------|
| <b>SP_36 05/31/02 18:30 003</b> |               |                            |              |                              |
| Barium                          | 97.6 J        | 2.0                        | mg/kg        | SW846 6010B                  |
| Cadmium                         | 0.18 B, J     | 0.50                       | mg/kg        | SW846 6010B                  |
| Chromium                        | 21.8          | 1.0                        | mg/kg        | SW846 6010B                  |
| Beryllium                       | 0.46 B        | 0.50                       | mg/kg        | SW846 6010B                  |
| Lead                            | 5.2           | 0.50                       | mg/kg        | SW846 6010B                  |
| Cobalt                          | 7.4           | 5.0                        | mg/kg        | SW846 6010B                  |
| Copper                          | 18.9          | 2.5                        | mg/kg        | SW846 6010B                  |
| Molybdenum                      | 0.85 B, J     | 4.0                        | mg/kg        | SW846 6010B                  |
| Nickel                          | 14.3          | 4.0                        | mg/kg        | SW846 6010B                  |
| Vanadium                        | 38.2          | 5.0                        | mg/kg        | SW846 6010B                  |
| Zinc                            | 48.5          | 2.0                        | mg/kg        | SW846 6010B                  |
| <b>SP_38 05/31/02 19:08 004</b> |               |                            |              |                              |
| C24-C27                         | 2.1 J         | 10                         | mg/kg        | SW846 8015B                  |
| C32-C35                         | 3.1 J         | 10                         | mg/kg        | SW846 8015B                  |
| C36-C39                         | 2.4 J         | 10                         | mg/kg        | SW846 8015B                  |
| Total Carbon Chain Range        | 7.6 J         | 10                         | mg/kg        | SW846 8015B                  |
| C6-C8                           | 5.1           | 1.0                        | mg/kg        | SW846 8015B                  |
| Mercury                         | 0.028 B       | 0.10                       | mg/kg        | SW846 7471A                  |
| Aluminum                        | 8510          | 20.0                       | mg/kg        | SW846 6010B                  |
| Arsenic                         | 3.0           | 1.0                        | mg/kg        | SW846 6010B                  |
| Barium                          | 63.0 J        | 2.0                        | mg/kg        | SW846 6010B                  |
| Cadmium                         | 0.11 B, J     | 0.50                       | mg/kg        | SW846 6010B                  |
| Chromium                        | 19.2          | 1.0                        | mg/kg        | SW846 6010B                  |
| Beryllium                       | 0.34 B        | 0.50                       | mg/kg        | SW846 6010B                  |
| Lead                            | 4.3           | 0.50                       | mg/kg        | SW846 6010B                  |
| Selenium                        | 0.61          | 0.50                       | mg/kg        | SW846 6010B                  |
| Cobalt                          | 4.2 B         | 5.0                        | mg/kg        | SW846 6010B                  |
| Copper                          | 10.1          | 2.5                        | mg/kg        | SW846 6010B                  |
| Molybdenum                      | 0.63 B, J     | 4.0                        | mg/kg        | SW846 6010B                  |
| Nickel                          | 9.1           | 4.0                        | mg/kg        | SW846 6010B                  |
| Vanadium                        | 21.7          | 5.0                        | mg/kg        | SW846 6010B                  |
| Zinc                            | 31.0          | 2.0                        | mg/kg        | SW846 6010B                  |
| 1,1-Dichloroethene              | 350           | 25                         | ug/kg        | SW846 8260B                  |
| Acetone                         | 210           | 120                        | ug/kg        | SW846 8260B                  |
| 1,1-Dichloroethane              | 12 J          | 25                         | ug/kg        | SW846 8260B                  |
| cis-1,2-Dichloroethene          | 13 J          | 25                         | ug/kg        | SW846 8260B                  |
| 2-Butanone                      | 580           | 120                        | ug/kg        | SW846 8260B                  |
| 1,1,1-Trichloroethane           | 480           | 25                         | ug/kg        | SW846 8260B                  |
| Trichloroethene                 | 180           | 25                         | ug/kg        | SW846 8260B                  |
| 4-Methyl-2-pentanone            | 4000          | 120                        | ug/kg        | SW846 8260B                  |
| Toluene                         | 790           | 25                         | ug/kg        | SW846 8260B                  |

**000006**

## METHODS SUMMARY

E2F010157

| <u>PARAMETER</u>                           | <u>ANALYTICAL<br/>METHOD</u> | <u>PREPARATION<br/>METHOD</u> |
|--|------------------------------|-------------------------------|
| Extractable Petroleum Hydrocarbons         | SW846 8015B                  | SANA AUTO-SHAKE               |
| Inductively Coupled Plasma (ICP) Metals    | SW846 6010B                  | SW846 3050B                   |
| Mercury in Solid Waste (Manual Cold-Vapor) | SW846 7471A                  | SW846 7471A                   |
| Volatile Organics by GC/MS                 | SW846 8260B                  | SW846 5030                    |
| Volatile Organics by GC/MS                 | SW846 8260B                  | SW846 5030B/826               |
| Volatile Petroleum Hydrocarbons            | SW846 8015B                  | SW846 5030                    |

### References:

SW846 "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 and its updates.

000007

## SAMPLE SUMMARY

E2F010157

| <u>WO #</u> | <u>SAMPLE#</u> | <u>CLIENT SAMPLE ID</u> | <u>SAMPLED DATE</u> | <u>SAMP TIME</u> |
|-------------|----------------|-------------------------|---------------------|------------------|
| E2CDX       | 001            | DW_1                    | 05/31/02            | 17:45            |
| E2CD2       | 002            | SP_37                   | 05/31/02            | 18:15            |
| E2CD4       | 003            | SP_36                   | 05/31/02            | 18:30            |
| E2CD5       | 004            | SP_38                   | 05/31/02            | 19:08            |

### NOTE (S) :

- The analytical results of the samples listed above are presented on the following pages.
- All calculations are performed before rounding to avoid round-off errors in calculated results.
- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.

**000008**

## HALEY &amp; ALDRICH INC

Client Sample ID: DW\_1

## GC/MS Volatiles

Lot-Sample #....: E2F010157-001 Work Order #....: E2CDX1AA Matrix.....: WATER  
 Date Sampled...: 05/31/02 17:45 Date Received...: 06/01/02 12:16 MS Run #.....: 2155243  
 Prep Date.....: 06/04/02 Analysis Date...: 06/04/02  
 Prep Batch #....: 2155393 Analysis Time...: 00:50  
 Dilution Factor: 1  
 Analyst ID.....: 004648 Instrument ID...: MSC  
 Method.....: SW846 8260B

| PARAMETER                 | RESULT | REPORTING |       |      |
|---------------------------|--------|-----------|-------|------|
|                           |        | LIMIT     | UNITS | MDL  |
| Dichlorodifluoromethane   | ND     | 1.0       | ug/L  | 0.40 |
| Chloromethane             | ND     | 2.0       | ug/L  | 0.30 |
| Vinyl chloride            | ND     | 0.50      | ug/L  | 0.30 |
| Chloroethane              | ND     | 2.0       | ug/L  | 0.30 |
| Bromomethane              | ND     | 2.0       | ug/L  | 1.0  |
| Trichlorofluoromethane    | ND     | 2.0       | ug/L  | 0.30 |
| 1,1-Dichloroethene        | 0.84 J | 1.0       | ug/L  | 0.30 |
| Methylene chloride        | ND     | 1.0       | ug/L  | 0.30 |
| Methyl tert-butyl ether   | 2.6    | 1.0       | ug/L  | 0.50 |
| Carbon disulfide          | ND     | 1.0       | ug/L  | 0.30 |
| Acetone                   | 25     | 10        | ug/L  | 3.0  |
| trans-1,2-Dichloroethene  | ND     | 1.0       | ug/L  | 0.30 |
| 1,1-Dichloroethane        | ND     | 1.0       | ug/L  | 0.20 |
| 2,2-Dichloropropane       | ND     | 1.0       | ug/L  | 0.30 |
| cis-1,2-Dichloroethene    | ND     | 1.0       | ug/L  | 0.30 |
| Chloroform                | 1.5    | 1.0       | ug/L  | 0.30 |
| Bromochloromethane        | ND     | 1.0       | ug/L  | 0.30 |
| 1,1,1-Trichloroethane     | 1.3    | 1.0       | ug/L  | 0.20 |
| 2-Butanone                | ND     | 5.0       | ug/L  | 3.0  |
| 1,1-Dichloropropene       | ND     | 1.0       | ug/L  | 0.30 |
| Carbon tetrachloride      | ND     | 0.50      | ug/L  | 0.30 |
| 1,2-Dibromoethane         | ND     | 1.0       | ug/L  | 0.30 |
| Benzene                   | ND     | 1.0       | ug/L  | 0.30 |
| Trichloroethene           | 0.55 J | 1.0       | ug/L  | 0.30 |
| Bromodichloromethane      | ND     | 1.0       | ug/L  | 0.30 |
| 4-Methyl-2-pentanone      | 14     | 5.0       | ug/L  | 3.0  |
| Toluene                   | 8.2    | 1.0       | ug/L  | 0.30 |
| 1,1,2-Trichloroethane     | ND     | 1.0       | ug/L  | 0.30 |
| 1,2-Dichloroethane        | ND     | 0.50      | ug/L  | 0.40 |
| Tetrachloroethene         | ND     | 1.0       | ug/L  | 0.30 |
| 2-Hexanone                | ND     | 5.0       | ug/L  | 3.0  |
| Dibromochloromethane      | ND     | 1.0       | ug/L  | 0.40 |
| Chlorobenzene             | 4.6    | 1.0       | ug/L  | 0.30 |
| 1,1,1,2-Tetrachloroethane | ND     | 1.0       | ug/L  | 0.30 |
| Ethylbenzene              | ND     | 1.0       | ug/L  | 0.20 |
| Xylenes (total)           | 0.86 J | 1.0       | ug/L  | 0.80 |
| Styrene                   | ND     | 1.0       | ug/L  | 0.30 |

(Continued on next page)

000009

## HALEY &amp; ALDRICH INC

Client Sample ID: DW\_1

## GC/MS Volatiles

Lot-Sample #...: E2F010157-001 Work Order #...: E2CDX1AA Matrix.....: WATER

| PARAMETER                 | RESULT | REPORTING |       |      |
|---------------------------|--------|-----------|-------|------|
|                           |        | LIMIT     | UNITS | MDL  |
| Bromoform                 | 0.69 J | 1.0       | ug/L  | 0.30 |
| Isopropylbenzene          | ND     | 1.0       | ug/L  | 0.30 |
| 1,1,2,2-Tetrachloroethane | ND     | 1.0       | ug/L  | 0.40 |
| 1,2,3-Trichloropropane    | ND     | 1.0       | ug/L  | 0.40 |
| n-Propylbenzene           | ND     | 1.0       | ug/L  | 0.40 |
| Bromobenzene              | ND     | 1.0       | ug/L  | 0.30 |
| 1,3,5-Trimethylbenzene    | ND     | 1.0       | ug/L  | 0.20 |
| 2-Chlorotoluene           | ND     | 1.0       | ug/L  | 0.30 |
| 4-Chlorotoluene           | ND     | 1.0       | ug/L  | 0.30 |
| tert-Butylbenzene         | ND     | 1.0       | ug/L  | 0.20 |
| 1,2,4-Trimethylbenzene    | ND     | 1.0       | ug/L  | 0.30 |
| sec-Butylbenzene          | ND     | 1.0       | ug/L  | 0.30 |
| p-Isopropyltoluene        | ND     | 1.0       | ug/L  | 0.30 |
| 1,3-Dichlorobenzene       | ND     | 1.0       | ug/L  | 0.30 |
| 1,4-Dichlorobenzene       | ND     | 1.0       | ug/L  | 0.30 |
| n-Butylbenzene            | ND     | 1.0       | ug/L  | 0.30 |
| 1,2-Dichlorobenzene       | ND     | 1.0       | ug/L  | 0.30 |
| 1,2-Dibromo-3-chloro-     | ND     | 2.0       | ug/L  | 0.70 |
| propane                   |        |           |       |      |
| 1,2,4-Trichloro-          | ND     | 1.0       | ug/L  | 0.30 |
| benzene                   |        |           |       |      |
| Hexachlorobutadiene       | ND     | 1.0       | ug/L  | 0.30 |
| 1,2,3-Trichlorobenzene    | ND     | 1.0       | ug/L  | 0.40 |
| Acrolein                  | ND     | 20        | ug/L  | 12   |
| Tert-amyl methyl ether    | ND     | 2.0       | ug/L  | 0.50 |
| Acrylonitrile             | ND     | 20        | ug/L  | 10   |
| Tert-butyl ethyl ether    | ND     | 2.0       | ug/L  | 0.50 |
| t-Butanol                 | ND     | 25        | ug/L  | 6.0  |
| Iodomethane               | ND     | 2.0       | ug/L  | 1.0  |
| Isopropyl ether           | ND     | 2.0       | ug/L  | 0.50 |
| 2-Chloroethyl vinyl ether | ND     | 5.0       | ug/L  | 2.0  |
| Tetrahydrofuran           | ND     | 10        | ug/L  | 2.0  |
| Vinyl acetate             | ND     | 5.0       | ug/L  | 2.0  |

| SURROGATE             | PERCENT<br>RECOVERY | RECOVERY |        |
|-----------------------|---------------------|----------|--------|
|                       |                     | LIMITS   |        |
| Bromofluorobenzene    | 104                 | (75      | - 130) |
| 1,2-Dichloroethane-d4 | 112                 | (65      | - 135) |
| Toluene-d8            | 103                 | (80      | - 130) |

## NOTE(S) :

J Estimated result. Result is less than RL.

000010

HALEY & ALDRICH INC

DW\_1

GC/MS Volatiles

Lot-Sample #: E2F010157-001      Work Order #: E2CDX1AA      Matrix: WATER

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS

| <u>PARAMETER</u> | <u>CAS #</u> | <u>ESTIMATED<br/>RESULT</u> | <u>RETENTION<br/>TIME</u> | <u>UNITS</u> |
|------------------|--------------|-----------------------------|---------------------------|--------------|
| None             |              |                             |                           | ug/L         |

000011

BOE-C6-0003289

## HALEY &amp; ALDRICH INC

Client Sample ID: SP\_37

## GC/MS Volatiles

Lot-Sample #....: E2F010157-002 Work Order #....: E2CD21AD Matrix.....: SOLID  
 Date Sampled....: 05/31/02 18:15 Date Received...: 06/01/02 12:16 MS Run #.....: 2156145  
 Prep Date.....: 06/04/02 Analysis Date...: 06/04/02  
 Prep Batch #....: 2156314 Analysis Time...: 12:58  
 Dilution Factor: 1  
 Analyst ID.....: 064667 Instrument ID...: MSD  
 Method.....: SW846 8260B

| PARAMETER                 | RESULT | REPORTING |       |     |
|---------------------------|--------|-----------|-------|-----|
|                           |        | LIMIT     | UNITS | MDL |
| Dichlorodifluoromethane   | ND     | 10        | ug/kg | 1.0 |
| Chloromethane             | ND     | 10        | ug/kg | 3.0 |
| Vinyl chloride            | ND     | 10        | ug/kg | 2.0 |
| Bromomethane              | ND     | 10        | ug/kg | 8.0 |
| 1,2-Dibromoethane         | ND     | 5.0       | ug/kg | 3.0 |
| Chloroethane              | ND     | 10        | ug/kg | 2.0 |
| Trichlorodifluoromethane  | ND     | 10        | ug/kg | 2.0 |
| Acrolein                  | ND     | 100       | ug/kg | 30  |
| 1,1-Dichloroethene        | ND     | 5.0       | ug/kg | 2.0 |
| Iodomethane               | ND     | 10        | ug/kg | 10  |
| Acetone                   | ND     | 25        | ug/kg | 15  |
| Carbon disulfide          | ND     | 5.0       | ug/kg | 3.0 |
| Methylene chloride        | ND     | 5.0       | ug/kg | 3.0 |
| trans-1,2-Dichloroethene  | ND     | 5.0       | ug/kg | 2.0 |
| Acrylonitrile             | ND     | 100       | ug/kg | 30  |
| Methyl tert-butyl ether   | ND     | 5.0       | ug/kg | 1.0 |
| 1,1-Dichloroethane        | ND     | 5.0       | ug/kg | 1.0 |
| Vinyl acetate             | ND     | 10        | ug/kg | 5.0 |
| 2,2-Dichloropropane       | ND     | 5.0       | ug/kg | 2.0 |
| cis-1,2-Dichloroethene    | ND     | 5.0       | ug/kg | 2.0 |
| 2-Butanone                | ND     | 25        | ug/kg | 15  |
| Bromochloromethane        | ND     | 5.0       | ug/kg | 1.0 |
| Chloroform                | ND     | 5.0       | ug/kg | 1.0 |
| Tetrahydrofuran           | ND     | 20        | ug/kg | 2.0 |
| 1,1,1-Trichloroethane     | ND     | 5.0       | ug/kg | 1.0 |
| 1,1-Dichloropropene       | ND     | 5.0       | ug/kg | 1.0 |
| Carbon tetrachloride      | ND     | 5.0       | ug/kg | 1.0 |
| Benzene                   | ND     | 5.0       | ug/kg | 2.0 |
| 1,2-Dichloroethane        | ND     | 5.0       | ug/kg | 1.0 |
| Trichloroethene           | ND     | 5.0       | ug/kg | 2.0 |
| 1,2-Dichloropropane       | ND     | 5.0       | ug/kg | 1.0 |
| Bromodichloromethane      | ND     | 5.0       | ug/kg | 1.0 |
| 2-Chloroethyl vinyl ether | ND     | 10        | ug/kg | 5.0 |
| cis-1,3-Dichloropropene   | ND     | 5.0       | ug/kg | 1.0 |
| 4-Methyl-2-pentanone      | ND     | 25        | ug/kg | 10  |
| Toluene                   | ND     | 5.0       | ug/kg | 2.0 |
| trans-1,3-Dichloropropene | ND     | 5.0       | ug/kg | 3.0 |

(Continued on next page)

**000012**

## HALEY &amp; ALDRICH INC

Client Sample ID: SP\_37

## GC/MS Volatiles

Lot-Sample #....: E2F010157-002 Work Order #....: E2CD21AD Matrix.....: SOLID

| <u>PARAMETER</u>                 | <u>RESULT</u> | <u>REPORTING<br/>LIMIT</u>  | <u>UNITS</u>               | <u>MDL</u> |
|----------------------------------|---------------|-----------------------------|----------------------------|------------|
| 1,1,2-Trichloroethane            | ND            | 5.0                         | ug/kg                      | 3.0        |
| Tetrachloroethene                | ND            | 5.0                         | ug/kg                      | 2.0        |
| 2-Hexanone                       | ND            | 25                          | ug/kg                      | 10         |
| Dibromochloromethane             | ND            | 5.0                         | ug/kg                      | 1.0        |
| Chlorobenzene                    | ND            | 5.0                         | ug/kg                      | 2.0        |
| Ethylbenzene                     | ND            | 5.0                         | ug/kg                      | 2.0        |
| Xylenes (total)                  | ND            | 5.0                         | ug/kg                      | 3.0        |
| Styrene                          | ND            | 10                          | ug/kg                      | 2.0        |
| Bromoform                        | ND            | 5.0                         | ug/kg                      | 3.0        |
| Isopropylbenzene                 | ND            | 5.0                         | ug/kg                      | 2.0        |
| p-Isopropyltoluene               | ND            | 5.0                         | ug/kg                      | 2.0        |
| Bromobenzene                     | ND            | 5.0                         | ug/kg                      | 2.0        |
| 1,1,1,2-Tetrachloroethane        | ND            | 5.0                         | ug/kg                      | 3.0        |
| 1,1,2,2-Tetrachloroethane        | ND            | 5.0                         | ug/kg                      | 3.0        |
| 1,2,3-Trichloropropane           | ND            | 5.0                         | ug/kg                      | 3.0        |
| n-Propylbenzene                  | ND            | 5.0                         | ug/kg                      | 2.0        |
| 2-Chlorotoluene                  | ND            | 5.0                         | ug/kg                      | 2.0        |
| 4-Chlorotoluene                  | ND            | 5.0                         | ug/kg                      | 2.0        |
| 1,3,5-Trimethylbenzene           | ND            | 5.0                         | ug/kg                      | 2.0        |
| tert-Butylbenzene                | ND            | 5.0                         | ug/kg                      | 2.0        |
| 1,2,4-Trimethylbenzene           | ND            | 5.0                         | ug/kg                      | 2.0        |
| sec-Butylbenzene                 | ND            | 5.0                         | ug/kg                      | 2.0        |
| 1,3-Dichlorobenzene              | ND            | 5.0                         | ug/kg                      | 2.0        |
| 1,4-Dichlorobenzene              | ND            | 5.0                         | ug/kg                      | 2.0        |
| 1,2-Dichlorobenzene              | ND            | 5.0                         | ug/kg                      | 2.0        |
| n-Butylbenzene                   | ND            | 5.0                         | ug/kg                      | 2.0        |
| 1,2-Dibromo-3-chloro-<br>propane | ND            | 10                          | ug/kg                      | 3.0        |
| 1,2,4-Trichloro-<br>benzene      | ND            | 5.0                         | ug/kg                      | 2.0        |
| Hexachlorobutadiene              | ND            | 5.0                         | ug/kg                      | 2.0        |
| 1,2,3-Trichlorobenzene           | ND            | 5.0                         | ug/kg                      | 2.0        |
| t-Butanol                        | ND            | 100                         | ug/kg                      | 50         |
| Isopropyl ether                  | ND            | 10                          | ug/kg                      | 1.0        |
| Tert-amyl methyl ether           | ND            | 10                          | ug/kg                      | 2.0        |
| Tert-butyl ethyl ether           | ND            | 10                          | ug/kg                      | 1.0        |
| <u>SURROGATE</u>                 |               | <u>PERCENT<br/>RECOVERY</u> | <u>RECOVERY<br/>LIMITS</u> |            |
| Bromofluorobenzene               | 90            | (65 - 135)                  |                            |            |
| 1,2-Dichloroethane-d4            | 97            | (60 - 140)                  |                            |            |
| Toluene-d8                       | 96            | (70 - 130)                  |                            |            |

000013

HALEY & ALDRICH INC

SP\_37

GC/MS Volatiles

Lot-Sample #: E2F010157-002      Work Order #: E2CD21AD      Matrix: SOLID

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS

| <u>PARAMETER</u> | <u>CAS #</u> | <u>ESTIMATED<br/>RESULT</u> | <u>RETENTION<br/>TIME</u> | <u>UNITS</u> |
|------------------|--------------|-----------------------------|---------------------------|--------------|
| None             |              |                             |                           | ug/kg        |

**000014**

BOE-C6-0003292

HALEY & ALDRICH INC

Client Sample ID: SP\_37

GC Volatiles

Lot-Sample #....: E2F010157-002 Work Order #....: E2CD21AC Matrix.....: SOLID  
Date Sampled....: 05/31/02 18:15 Date Received...: 06/01/02 12:16 MS Run #.....: 2155201  
Prep Date.....: 06/03/02 Analysis Date...: 06/03/02  
Prep Batch #....: 2155360 Analysis Time...: 13:21  
Dilution Factor: 1  
Analyst ID.....: 001464 Instrument ID...: G16  
Method.....: SW846 8015B

| PARAMETER                    | REPORTING |            |        |      |
|------------------------------|-----------|------------|--------|------|
|                              | RESULT    | LIMIT      | UNITS  | MDL  |
| C6-C8                        | ND        | 1.0        | mg/kg  | 0.10 |
| <hr/>                        |           |            |        |      |
| SURROGATE                    | PERCENT   | RECOVERY   | LIMITS |      |
| a,a,a-Trifluorotoluene (TFT) | RECOVERY  | (60 - 130) |        |      |
|                              | 66        |            |        |      |

000015

## HALEY &amp; ALDRICH INC

Client Sample ID: SP\_37

## GC Semivolatiles

Lot-Sample #....: E2F010157-002 Work Order #....: E2CD21AA Matrix.....: SOLID  
 Date Sampled....: 05/31/02 18:15 Date Received...: 06/01/02 12:16 MS Run #.....: 2154216  
 Prep Date.....: 06/03/02 Analysis Date...: 06/04/02  
 Prep Batch #....: 2154442 Analysis Time...: 16:07  
 Dilution Factor: 1  
 Analyst ID.....: 356074 Instrument ID...: G03  
 Method.....: SW846 8015B

| <u>PARAMETER</u>         | <u>REPORTING</u> |                |                      |            |
|--------------------------|------------------|----------------|----------------------|------------|
|                          | <u>RESULT</u>    | <u>LIMIT</u>   | <u>UNITS</u>         | <u>MDL</u> |
| C8-C9                    | ND               | 10             | mg/kg                | 2.0        |
| C10-C11                  | ND               | 10             | mg/kg                | 2.0        |
| C12-C13                  | ND               | 10             | mg/kg                | 2.0        |
| C14-C15                  | ND               | 10             | mg/kg                | 2.0        |
| C16-C17                  | ND               | 10             | mg/kg                | 2.0        |
| C18-C19                  | ND               | 10             | mg/kg                | 2.0        |
| C20-C23                  | 2.1 J            | 10             | mg/kg                | 2.0        |
| C24-C27                  | 2.7 J            | 10             | mg/kg                | 2.0        |
| C28-C31                  | 3.9 J            | 10             | mg/kg                | 2.0        |
| C32-C35                  | 11               | 10             | mg/kg                | 2.0        |
| C36-C39                  | 7.6 J            | 10             | mg/kg                | 2.0        |
| C40+                     | ND               | 10             | mg/kg                | 2.0        |
| Total Carbon Chain Range | 28               | 10             | mg/kg                | 2.0        |
| <u>SURROGATE</u>         |                  | <u>PERCENT</u> | <u>RECOVERY</u>      |            |
| Benzo(a)pyrene           |                  | 88             | LIMITS<br>(60 - 130) |            |

NOTE (S) :

J Estimated result. Result is less than RL.

000016

**HALEY & ALDRICH INC**

**Client Sample ID:** SP 37

## TOTAL Metals

Lot-Sample #....: E2F010157-002 Matrix.....: SOLID  
Date Sampled...: 05/31/02 18:15 Date Received...: 06/01/02 12:16

| PARAMETER         | RESULT   | REPORTING             |       |                   | METHOD  | PREPARATION-     |          | WORK<br>ORDER # |
|-------------------|----------|-----------------------|-------|-------------------|---------|------------------|----------|-----------------|
|                   |          | LIMIT                 | UNITS |                   |         | ANALYSIS         | DATE     |                 |
| Prep Batch #....: | 2154211  |                       |       |                   |         |                  |          |                 |
| Aluminum          | 17300    | 20.0                  | mg/kg | SW846 6010B       |         | 06/03-06/04/02   | E2CD21AE |                 |
|                   |          | Dilution Factor: 1    |       | Analysis Time...: | 12:01   | Analyst ID.....: | 021088   |                 |
|                   |          | Instrument ID...: M01 |       | MS Run #.....:    | 2154078 | MDL.....:        | 8.0      |                 |
| Arsenic           | 4.6      | 1.0                   | mg/kg | SW846 6010B       |         | 06/03-06/04/02   | E2CD21AF |                 |
|                   |          | Dilution Factor: 1    |       | Analysis Time...: | 12:01   | Analyst ID.....: | 021088   |                 |
|                   |          | Instrument ID...: M01 |       | MS Run #.....:    | 2154078 | MDL.....:        | 0.40     |                 |
| Antimony          | ND       | 6.0                   | mg/kg | SW846 6010B       |         | 06/03-06/04/02   | E2CD21AG |                 |
|                   |          | Dilution Factor: 1    |       | Analysis Time...: | 12:01   | Analyst ID.....: | 021088   |                 |
|                   |          | Instrument ID...: M01 |       | MS Run #.....:    | 2154078 | MDL.....:        | 0.60     |                 |
| Barium            | 144 J    | 2.0                   | mg/kg | SW846 6010B       |         | 06/03-06/04/02   | E2CD21AH |                 |
|                   |          | Dilution Factor: 1    |       | Analysis Time...: | 12:01   | Analyst ID.....: | 021088   |                 |
|                   |          | Instrument ID...: M01 |       | MS Run #.....:    | 2154078 | MDL.....:        | 0.10     |                 |
| Cadmium           | 0.32 B,J | 0.50                  | mg/kg | SW846 6010B       |         | 06/03-06/04/02   | E2CD21AJ |                 |
|                   |          | Dilution Factor: 1    |       | Analysis Time...: | 12:01   | Analyst ID.....: | 021088   |                 |
|                   |          | Instrument ID...: M01 |       | MS Run #.....:    | 2154078 | MDL.....:        | 0.060    |                 |
| Chromium          | 26.0     | 1.0                   | mg/kg | SW846 6010B       |         | 06/03-06/04/02   | E2CD21AK |                 |
|                   |          | Dilution Factor: 1    |       | Analysis Time...: | 12:01   | Analyst ID.....: | 021088   |                 |
|                   |          | Instrument ID...: M01 |       | MS Run #.....:    | 2154078 | MDL.....:        | 0.10     |                 |
| Beryllium         | 0.55     | 0.50                  | mg/kg | SW846 6010B       |         | 06/03-06/04/02   | E2CD21AL |                 |
|                   |          | Dilution Factor: 1    |       | Analysis Time...: | 12:01   | Analyst ID.....: | 021088   |                 |
|                   |          | Instrument ID...: M01 |       | MS Run #.....:    | 2154078 | MDL.....:        | 0.050    |                 |
| Lead              | 5.5      | 0.50                  | mg/kg | SW846 6010B       |         | 06/03-06/04/02   | E2CD21AM |                 |
|                   |          | Dilution Factor: 1    |       | Analysis Time...: | 12:01   | Analyst ID.....: | 021088   |                 |
|                   |          | Instrument ID...: M01 |       | MS Run #.....:    | 2154078 | MDL.....:        | 0.30     |                 |
| Selenium          | 0.82     | 0.50                  | mg/kg | SW846 6010B       |         | 06/03-06/04/02   | E2CD21AN |                 |
|                   |          | Dilution Factor: 1    |       | Analysis Time...: | 12:01   | Analyst ID.....: | 021088   |                 |
|                   |          | Instrument ID...: M01 |       | MS Run #.....:    | 2154078 | MDL.....:        | 0.40     |                 |

(Continued on next page)

000017

## HALEY &amp; ALDRICH INC

Client Sample ID: SP\_37

## TOTAL Metals

Lot-Sample #...: E2F010157-002

Matrix.....: SOLID

| PARAMETER                | RESULT   | REPORTING             |       | METHOD                  | PREPARATION-   | WORK                    | ORDER #  |
|--------------------------|----------|-----------------------|-------|-------------------------|----------------|-------------------------|----------|
|                          |          | LIMIT                 | UNITS |                         |                |                         |          |
| Silver                   | ND       | 1.0                   | mg/kg | SW846 6010B             | 06/03-06/04/02 | Analyst ID.....: 021088 | E2CD21AP |
|                          |          | Dilution Factor: 1    |       | Analysis Time...: 12:01 |                |                         |          |
|                          |          | Instrument ID...: M01 |       | MS Run #.....: 2154078  |                | MDL.....: 0.10          |          |
| Cobalt                   | 8.6      | 5.0                   | mg/kg | SW846 6010B             | 06/03-06/04/02 | Analyst ID.....: 021088 | E2CD21AQ |
|                          |          | Dilution Factor: 1    |       | Analysis Time...: 12:01 |                |                         |          |
|                          |          | Instrument ID...: M01 |       | MS Run #.....: 2154078  |                | MDL.....: 0.10          |          |
| Copper                   | 23.2     | 2.5                   | mg/kg | SW846 6010B             | 06/03-06/04/02 | Analyst ID.....: 021088 | E2CD21AR |
|                          |          | Dilution Factor: 1    |       | Analysis Time...: 12:01 |                |                         |          |
|                          |          | Instrument ID...: M01 |       | MS Run #.....: 2154078  |                | MDL.....: 0.40          |          |
| Molybdenum               | 0.77 B,J | 4.0                   | mg/kg | SW846 6010B             | 06/03-06/04/02 | Analyst ID.....: 021088 | E2CD21AT |
|                          |          | Dilution Factor: 1    |       | Analysis Time...: 12:01 |                |                         |          |
|                          |          | Instrument ID...: M01 |       | MS Run #.....: 2154078  |                | MDL.....: 0.30          |          |
| Nickel                   | 17.1     | 4.0                   | mg/kg | SW846 6010B             | 06/03-06/04/02 | Analyst ID.....: 021088 | E2CD21AU |
|                          |          | Dilution Factor: 1    |       | Analysis Time...: 12:01 |                |                         |          |
|                          |          | Instrument ID...: M01 |       | MS Run #.....: 2154078  |                | MDL.....: 0.30          |          |
| Thallium                 | ND       | 1.0                   | mg/kg | SW846 6010B             | 06/03-06/04/02 | Analyst ID.....: 021088 | E2CD21AV |
|                          |          | Dilution Factor: 1    |       | Analysis Time...: 12:01 |                |                         |          |
|                          |          | Instrument ID...: M01 |       | MS Run #.....: 2154078  |                | MDL.....: 0.80          |          |
| Vanadium                 | 46.8     | 5.0                   | mg/kg | SW846 6010B             | 06/03-06/04/02 | Analyst ID.....: 021088 | E2CD21AW |
|                          |          | Dilution Factor: 1    |       | Analysis Time...: 12:01 |                |                         |          |
|                          |          | Instrument ID...: M01 |       | MS Run #.....: 2154078  |                | MDL.....: 0.10          |          |
| Zinc                     | 57.9     | 2.0                   | mg/kg | SW846 6010B             | 06/03-06/04/02 | Analyst ID.....: 021088 | E2CD21AX |
|                          |          | Dilution Factor: 1    |       | Analysis Time...: 12:01 |                |                         |          |
|                          |          | Instrument ID...: M01 |       | MS Run #.....: 2154078  |                | MDL.....: 1.0           |          |
| Prep Batch #...: 2154215 |          |                       |       |                         |                |                         |          |
| Mercury                  | 0.055 B  | 0.10                  | mg/kg | SW846 7471A             | 06/03-06/07/02 | Analyst ID.....: 000023 | E2CD21A0 |
|                          |          | Dilution Factor: 1    |       | Analysis Time...: 09:24 |                |                         |          |
|                          |          | Instrument ID...: M04 |       | MS Run #.....: 2154083  |                | MDL.....: 0.020         |          |

## NOTE(S) :

J Method blank contamination. The associated method blank contains the target analyte at a reportable level.

B Estimated result. Result is less than RL.

000018

## HALEY &amp; ALDRICH INC

Client Sample ID: SP\_36

## GC/MS Volatiles

Lot-Sample #....: E2F010157-003    Work Order #....: E2CD41AF    Matrix.....: SOLID  
 Date Sampled....: 05/31/02 18:30    Date Received...: 06/01/02 12:16 MS Run #.....: 2156145  
 Prep Date.....: 06/04/02    Analysis Date...: 06/04/02  
 Prep Batch #....: 2156314    Analysis Time...: 13:28  
 Dilution Factor: 1  
 Analyst ID.....: 064667    Instrument ID...: MSD  
 Method.....: SW846 8260B

| PARAMETER                 | RESULT | REPORTING<br>LIMIT | UNITS | MDL |
|---------------------------|--------|--------------------|-------|-----|
| Dichlorodifluoromethane   | ND     | 10                 | ug/kg | 1.0 |
| Chloromethane             | ND     | 10                 | ug/kg | 3.0 |
| Vinyl chloride            | ND     | 10                 | ug/kg | 2.0 |
| Bromomethane              | ND     | 10                 | ug/kg | 8.0 |
| 1,2-Dibromoethane         | ND     | 5.0                | ug/kg | 3.0 |
| Chloroethane              | ND     | 10                 | ug/kg | 2.0 |
| Trichlorofluoromethane    | ND     | 10                 | ug/kg | 2.0 |
| Acrolein                  | ND     | 100                | ug/kg | 30  |
| 1,1-Dichloroethene        | ND     | 5.0                | ug/kg | 2.0 |
| Iodomethane               | ND     | 10                 | ug/kg | 10  |
| Acetone                   | ND     | 25                 | ug/kg | 15  |
| Carbon disulfide          | ND     | 5.0                | ug/kg | 3.0 |
| Methylene chloride        | ND     | 5.0                | ug/kg | 3.0 |
| trans-1,2-Dichloroethene  | ND     | 5.0                | ug/kg | 2.0 |
| Acrylonitrile             | ND     | 100                | ug/kg | 30  |
| Methyl tert-butyl ether   | ND     | 5.0                | ug/kg | 1.0 |
| 1,1-Dichloroethane        | ND     | 5.0                | ug/kg | 1.0 |
| Vinyl acetate             | ND     | 10                 | ug/kg | 5.0 |
| 2,2-Dichloropropane       | ND     | 5.0                | ug/kg | 2.0 |
| cis-1,2-Dichloroethene    | ND     | 5.0                | ug/kg | 2.0 |
| 2-Butanone                | ND     | 25                 | ug/kg | 15  |
| Bromochloromethane        | ND     | 5.0                | ug/kg | 1.0 |
| Chloroform                | ND     | 5.0                | ug/kg | 1.0 |
| Tetrahydrofuran           | ND     | 20                 | ug/kg | 2.0 |
| 1,1,1-Trichloroethane     | ND     | 5.0                | ug/kg | 1.0 |
| 1,1-Dichloropropene       | ND     | 5.0                | ug/kg | 1.0 |
| Carbon tetrachloride      | ND     | 5.0                | ug/kg | 1.0 |
| Benzene                   | ND     | 5.0                | ug/kg | 2.0 |
| 1,2-Dichloroethane        | ND     | 5.0                | ug/kg | 1.0 |
| Trichloroethene           | ND     | 5.0                | ug/kg | 2.0 |
| 1,2-Dichloropropane       | ND     | 5.0                | ug/kg | 1.0 |
| Bromodichloromethane      | ND     | 5.0                | ug/kg | 1.0 |
| 2-Chloroethyl vinyl ether | ND     | 10                 | ug/kg | 5.0 |
| cis-1,3-Dichloropropene   | ND     | 5.0                | ug/kg | 1.0 |
| 4-Methyl-2-pentanone      | ND     | 25                 | ug/kg | 10  |
| Toluene                   | ND     | 5.0                | ug/kg | 2.0 |
| trans-1,3-Dichloropropene | ND     | 5.0                | ug/kg | 3.0 |

(Continued on next page)

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## HALEY &amp; ALDRICH INC

Client Sample ID: SP\_36

## GC/MS Volatiles

Lot-Sample #....: E2F010157-003 Work Order #....: E2CD41AF Matrix.....: SOLID

| <u>PARAMETER</u>             | <u>RESULT</u> | <u>REPORTING</u> |                 | <u>MDL</u> |
|------------------------------|---------------|------------------|-----------------|------------|
|                              |               | <u>LIMIT</u>     | <u>UNITS</u>    |            |
| 1,1,2-Trichloroethane        | ND            | 5.0              | ug/kg           | 3.0        |
| Tetrachloroethene            | ND            | 5.0              | ug/kg           | 2.0        |
| 2-Hexanone                   | ND            | 25               | ug/kg           | 10         |
| Dibromochloromethane         | ND            | 5.0              | ug/kg           | 1.0        |
| Chlorobenzene                | ND            | 5.0              | ug/kg           | 2.0        |
| Ethylbenzene                 | ND            | 5.0              | ug/kg           | 2.0        |
| Xylenes (total)              | ND            | 5.0              | ug/kg           | 3.0        |
| Styrene                      | ND            | 10               | ug/kg           | 2.0        |
| Bromoform                    | ND            | 5.0              | ug/kg           | 3.0        |
| Isopropylbenzene             | ND            | 5.0              | ug/kg           | 2.0        |
| p-Isopropyltoluene           | ND            | 5.0              | ug/kg           | 2.0        |
| Bromobenzene                 | ND            | 5.0              | ug/kg           | 2.0        |
| 1,1,1,2-Tetrachloroethane    | ND            | 5.0              | ug/kg           | 3.0        |
| 1,1,2,2-Tetrachloroethane    | ND            | 5.0              | ug/kg           | 3.0        |
| 1,2,3-Trichloropropane       | ND            | 5.0              | ug/kg           | 3.0        |
| n-Propylbenzene              | ND            | 5.0              | ug/kg           | 2.0        |
| 2-Chlorotoluene              | ND            | 5.0              | ug/kg           | 2.0        |
| 4-Chlorotoluene              | ND            | 5.0              | ug/kg           | 2.0        |
| 1,3,5-Trimethylbenzene       | ND            | 5.0              | ug/kg           | 2.0        |
| tert-Butylbenzene            | ND            | 5.0              | ug/kg           | 2.0        |
| 1,2,4-Trimethylbenzene       | ND            | 5.0              | ug/kg           | 2.0        |
| sec-Butylbenzene             | ND            | 5.0              | ug/kg           | 2.0        |
| 1,3-Dichlorobenzene          | ND            | 5.0              | ug/kg           | 2.0        |
| 1,4-Dichlorobenzene          | ND            | 5.0              | ug/kg           | 2.0        |
| 1,2-Dichlorobenzene          | ND            | 5.0              | ug/kg           | 2.0        |
| n-Butylbenzene               | ND            | 5.0              | ug/kg           | 2.0        |
| 1,2-Dibromo-3-chloro-propane | ND            | 10               | ug/kg           | 3.0        |
| 1,2,4-Trichloro-benzene      | ND            | 5.0              | ug/kg           | 2.0        |
| Hexachlorobutadiene          | ND            | 5.0              | ug/kg           | 2.0        |
| 1,2,3-Trichlorobenzene       | ND            | 5.0              | ug/kg           | 2.0        |
| t-Butanol                    | ND            | 100              | ug/kg           | 50         |
| Isopropyl ether              | ND            | 10               | ug/kg           | 1.0        |
| Tert-amyl methyl ether       | ND            | 10               | ug/kg           | 2.0        |
| Tert-butyl ethyl ether       | ND            | 10               | ug/kg           | 1.0        |
| <u>SURROGATE</u>             |               | <u>PERCENT</u>   | <u>RECOVERY</u> |            |
|                              |               | <u>RECOVERY</u>  | <u>LIMITS</u>   |            |
| Bromofluorobenzene           | 103           |                  | (65 - 135)      |            |
| 1,2-Dichloroethane-d4        | 117           |                  | (60 - 140)      |            |
| Toluene-d8                   | 113           |                  | (70 - 130)      |            |

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HALEY & ALDRICH INC

SP\_36

GC/MS Volatiles

Lot-Sample #: E2F010157-003      Work Order #: E2CD41AF      Matrix: SOLID

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS

| PARAMETER           | CAS # | ESTIMATED | RETENTION | UNITS |
|---------------------|-------|-----------|-----------|-------|
|                     |       | RESULT    | TIME      |       |
| unknown hydrocarbon | 7.3   | M         | 21.225    | ug/kg |

NOTE(S) :

M: Result was measured against nearest internal standard assuming a response factor of 1.

**000021**

## HALEY &amp; ALDRICH INC

Client Sample ID: SP\_36

## GC Volatiles

Lot-Sample #....: E2F010157-003 Work Order #....: E2CD41AE Matrix.....: SOLID  
Date Sampled....: 05/31/02 18:30 Date Received...: 06/01/02 12:16 MS Run #.....: 2155201  
Prep Date.....: 06/03/02 Analysis Date..: 06/03/02  
Prep Batch #....: 2155360 Analysis Time..: 13:50  
Dilution Factor: 1  
Analyst ID.....: 001464 Instrument ID..: G16  
Method.....: SW846 8015B

| PARAMETER                    | REPORTING |          |        |            |
|------------------------------|-----------|----------|--------|------------|
|                              | RESULT    | LIMIT    | UNITS  | MDL        |
| C6-C8                        | ND        | 1.0      | mg/kg  | 0.10       |
| SURROGATE                    | PERCENT   |          |        |            |
|                              | RECOVERY  | RECOVERY | LIMITS | (60 - 130) |
| a,a,a-Trifluorotoluene (TFT) | 71        |          |        |            |

000022

## HALEY &amp; ALDRICH INC

Client Sample ID: SP\_36

## GC Semivolatiles

Lot-Sample #....: E2F010157-003 Work Order #....: E2CD41AD Matrix.....: SOLID  
 Date Sampled....: 05/31/02 18:30 Date Received...: 06/01/02 12:16 MS Run #.....: 2154216  
 Prep Date.....: 06/03/02 Analysis Date...: 06/04/02  
 Prep Batch #....: 2154442 Analysis Time...: 16:47  
 Dilution Factor: 1  
 Analyst ID.....: 356074 Instrument ID...: G03  
 Method.....: SW846 8015B

| <u>PARAMETER</u>         | <u>REPORTING</u> |                 |              |            |
|--------------------------|------------------|-----------------|--------------|------------|
|                          | <u>RESULT</u>    | <u>LIMIT</u>    | <u>UNITS</u> | <u>MDL</u> |
| C8-C9                    | ND               | 10              | mg/kg        | 2.0        |
| C10-C11                  | ND               | 10              | mg/kg        | 2.0        |
| C12-C13                  | ND               | 10              | mg/kg        | 2.0        |
| C14-C15                  | ND               | 10              | mg/kg        | 2.0        |
| C16-C17                  | ND               | 10              | mg/kg        | 2.0        |
| C18-C19                  | ND               | 10              | mg/kg        | 2.0        |
| C20-C23                  | ND               | 10              | mg/kg        | 2.0        |
| C24-C27                  | ND               | 10              | mg/kg        | 2.0        |
| C28-C31                  | ND               | 10              | mg/kg        | 2.0        |
| C32-C35                  | 2.6 J            | 10              | mg/kg        | 2.0        |
| C36-C39                  | ND               | 10              | mg/kg        | 2.0        |
| C40+                     | ND               | 10              | mg/kg        | 2.0        |
| Total Carbon Chain Range | 2.6 J            | 10              | mg/kg        | 2.0        |
| <hr/>                    |                  |                 |              |            |
| <u>SURROGATE</u>         | <u>PERCENT</u>   | <u>RECOVERY</u> |              |            |
|                          | <u>RECOVERY</u>  | <u>LIMITS</u>   |              |            |
| Benzo(a)pyrene           | 92               | (60 - 130)      |              |            |

NOTE(S) :

J Estimated result. Result is less than RL.

000023

## HALEY &amp; ALDRICH INC

Client Sample ID: SP\_36

## TOTAL Metals

Lot-Sample #....: E2F010157-003  
 Date Sampled...: 05/31/02 18:30 Date Received...: 06/01/02 12:16 Matrix.....: SOLID

| <u>PARAMETER</u>  | <u>RESULT</u> | <u>REPORTING<br/>LIMIT</u> | <u>UNITS</u> | <u>METHOD</u>           | <u>PREPARATION-<br/>ANALYSIS DATE</u> | <u>WORK<br/>ORDER #</u> |
|-------------------|---------------|----------------------------|--------------|-------------------------|---------------------------------------|-------------------------|
| Prep Batch #....: | 2154211       |                            |              |                         |                                       |                         |
| Aluminum          | 14100         | 20.0                       | mg/kg        | SW846 6010B             | 06/03-06/04/02                        | E2CD41AG                |
|                   |               | Dilution Factor: 1         |              | Analysis Time...: 12:09 | Analyst ID.....:                      | 021088                  |
|                   |               | Instrument ID...: M01      |              | MS Run #.....: 2154078  | MDL.....:                             | 8.0                     |
| Arsenic           | 4.1           | 1.0                        | mg/kg        | SW846 6010B             | 06/03-06/04/02                        | E2CD41AH                |
|                   |               | Dilution Factor: 1         |              | Analysis Time...: 12:09 | Analyst ID.....:                      | 021088                  |
|                   |               | Instrument ID...: M01      |              | MS Run #.....: 2154078  | MDL.....:                             | 0.40                    |
| Antimony          | ND            | 6.0                        | mg/kg        | SW846 6010B             | 06/03-06/04/02                        | E2CD41AJ                |
|                   |               | Dilution Factor: 1         |              | Analysis Time...: 12:09 | Analyst ID.....:                      | 021088                  |
|                   |               | Instrument ID...: M01      |              | MS Run #.....: 2154078  | MDL.....:                             | 0.60                    |
| Barium            | 97.6 J        | 2.0                        | mg/kg        | SW846 6010B             | 06/03-06/04/02                        | E2CD41AK                |
|                   |               | Dilution Factor: 1         |              | Analysis Time...: 12:09 | Analyst ID.....:                      | 021088                  |
|                   |               | Instrument ID...: M01      |              | MS Run #.....: 2154078  | MDL.....:                             | 0.10                    |
| Cadmium           | 0.18 B,J      | 0.50                       | mg/kg        | SW846 6010B             | 06/03-06/04/02                        | E2CD41AL                |
|                   |               | Dilution Factor: 1         |              | Analysis Time...: 12:09 | Analyst ID.....:                      | 021088                  |
|                   |               | Instrument ID...: M01      |              | MS Run #.....: 2154078  | MDL.....:                             | 0.060                   |
| Chromium          | 21.8          | 1.0                        | mg/kg        | SW846 6010B             | 06/03-06/04/02                        | E2CD41AM                |
|                   |               | Dilution Factor: 1         |              | Analysis Time...: 12:09 | Analyst ID.....:                      | 021088                  |
|                   |               | Instrument ID...: M01      |              | MS Run #.....: 2154078  | MDL.....:                             | 0.10                    |
| Beryllium         | 0.46 B        | 0.50                       | mg/kg        | SW846 6010B             | 06/03-06/04/02                        | E2CD41AN                |
|                   |               | Dilution Factor: 1         |              | Analysis Time...: 12:09 | Analyst ID.....:                      | 021088                  |
|                   |               | Instrument ID...: M01      |              | MS Run #.....: 2154078  | MDL.....:                             | 0.050                   |
| Lead              | 5.2           | 0.50                       | mg/kg        | SW846 6010B             | 06/03-06/04/02                        | E2CD41AP                |
|                   |               | Dilution Factor: 1         |              | Analysis Time...: 12:09 | Analyst ID.....:                      | 021088                  |
|                   |               | Instrument ID...: M01      |              | MS Run #.....: 2154078  | MDL.....:                             | 0.30                    |
| Selenium          | ND            | 0.50                       | mg/kg        | SW846 6010B             | 06/03-06/04/02                        | E2CD41AQ                |
|                   |               | Dilution Factor: 1         |              | Analysis Time...: 12:09 | Analyst ID.....:                      | 021088                  |
|                   |               | Instrument ID...: M01      |              | MS Run #.....: 2154078  | MDL.....:                             | 0.40                    |

(Continued on next page)

000024

## HALEY &amp; ALDRICH INC

Client Sample ID: SP\_36

## TOTAL Metals

Lot-Sample #...: E2F010157-003

Matrix.....: SOLID

| PARAMETER        | RESULT   | REPORTING             |       |  | METHOD                  | PREPARATION-<br>ANALYSIS DATE | WORK<br>ORDER # |
|------------------|----------|-----------------------|-------|--|-------------------------|-------------------------------|-----------------|
|                  |          | LIMIT                 | UNITS |  |                         |                               |                 |
| Silver           | ND       | 1.0                   | mg/kg |  | SW846 6010B             | 06/03-06/04/02                | E2CD41AR        |
|                  |          | Dilution Factor: 1    |       |  | Analysis Time...: 12:09 | Analyst ID.....: 021088       |                 |
|                  |          | Instrument ID...: M01 |       |  | MS Run #.....: 2154078  | MDL.....: 0.10                |                 |
| Cobalt           | 7.4      | 5.0                   | mg/kg |  | SW846 6010B             | 06/03-06/04/02                | E2CD41AT        |
|                  |          | Dilution Factor: 1    |       |  | Analysis Time...: 12:09 | Analyst ID.....: 021088       |                 |
|                  |          | Instrument ID...: M01 |       |  | MS Run #.....: 2154078  | MDL.....: 0.10                |                 |
| Copper           | 18.9     | 2.5                   | mg/kg |  | SW846 6010B             | 06/03-06/04/02                | E2CD41AU        |
|                  |          | Dilution Factor: 1    |       |  | Analysis Time...: 12:09 | Analyst ID.....: 021088       |                 |
|                  |          | Instrument ID...: M01 |       |  | MS Run #.....: 2154078  | MDL.....: 0.40                |                 |
| Molybdenum       | 0.85 B,J | 4.0                   | mg/kg |  | SW846 6010B             | 06/03-06/04/02                | E2CD41AV        |
|                  |          | Dilution Factor: 1    |       |  | Analysis Time...: 12:09 | Analyst ID.....: 021088       |                 |
|                  |          | Instrument ID...: M01 |       |  | MS Run #.....: 2154078  | MDL.....: 0.30                |                 |
| Nickel           | 14.3     | 4.0                   | mg/kg |  | SW846 6010B             | 06/03-06/04/02                | E2CD41AW        |
|                  |          | Dilution Factor: 1    |       |  | Analysis Time...: 12:09 | Analyst ID.....: 021088       |                 |
|                  |          | Instrument ID...: M01 |       |  | MS Run #.....: 2154078  | MDL.....: 0.30                |                 |
| Thallium         | ND       | 1.0                   | mg/kg |  | SW846 6010B             | 06/03-06/04/02                | E2CD41AX        |
|                  |          | Dilution Factor: 1    |       |  | Analysis Time...: 12:09 | Analyst ID.....: 021088       |                 |
|                  |          | Instrument ID...: M01 |       |  | MS Run #.....: 2154078  | MDL.....: 0.80                |                 |
| Vanadium         | 38.2     | 5.0                   | mg/kg |  | SW846 6010B             | 06/03-06/04/02                | E2CD41A0        |
|                  |          | Dilution Factor: 1    |       |  | Analysis Time...: 12:09 | Analyst ID.....: 021088       |                 |
|                  |          | Instrument ID...: M01 |       |  | MS Run #.....: 2154078  | MDL.....: 0.10                |                 |
| Zinc             | 48.5     | 2.0                   | mg/kg |  | SW846 6010B             | 06/03-06/04/02                | E2CD41A1        |
|                  |          | Dilution Factor: 1    |       |  | Analysis Time...: 12:09 | Analyst ID.....: 021088       |                 |
|                  |          | Instrument ID...: M01 |       |  | MS Run #.....: 2154078  | MDL.....: 1.0                 |                 |
| Prep Batch #...: | 2154215  |                       |       |  |                         |                               |                 |
| Mercury          | 0.037 B  | 0.10                  | mg/kg |  | SW846 7471A             | 06/03-06/07/02                | E2CD41AA        |
|                  |          | Dilution Factor: 1    |       |  | Analysis Time...: 09:26 | Analyst ID.....: 000023       |                 |
|                  |          | Instrument ID...: M04 |       |  | MS Run #.....: 2154083  | MDL.....: 0.020               |                 |

NOTE(S) :

J Method blank contamination. The associated method blank contains the target analyte at a reportable level.

B Estimated result. Result is less than RL.

000025

## HALEY &amp; ALDRICH INC

Client Sample ID: SP\_38

## GC/MS Volatiles

Lot-Sample #....: E2F010157-004    Work Order #....: E2CD51AF    Matrix.....: SOLID  
 Date Sampled....: 05/31/02 19:08    Date Received...: 06/01/02 12:16    MS Run #.....: 2155104  
 Prep Date.....: 06/03/02    Analysis Date...: 06/03/02  
 Prep Batch #....: 2155254    Analysis Time..: 21:16  
 Dilution Factor: 5  
 Analyst ID.....: 064667    Instrument ID...: MSD  
 Method.....: SW846 8260B

| PARAMETER                 | RESULT | REPORTING |       |     |
|---------------------------|--------|-----------|-------|-----|
|                           |        | LIMIT     | UNITS | MDL |
| Dichlorodifluoromethane   | ND     | 50        | ug/kg | 5.0 |
| Chloromethane             | ND     | 50        | ug/kg | 15  |
| Vinyl chloride            | ND     | 50        | ug/kg | 10  |
| Bromomethane              | ND     | 50        | ug/kg | 40  |
| 1,2-Dibromoethane         | ND     | 25        | ug/kg | 15  |
| Chloroethane              | ND     | 50        | ug/kg | 10  |
| Trichlorofluoromethane    | ND     | 50        | ug/kg | 10  |
| Acrolein                  | ND     | 500       | ug/kg | 150 |
| 1,1-Dichloroethene        | 350    | 25        | ug/kg | 10  |
| Iodomethane               | ND     | 50        | ug/kg | 50  |
| Acetone                   | 210    | 120       | ug/kg | 75  |
| Carbon disulfide          | ND     | 25        | ug/kg | 15  |
| Methylene chloride        | ND     | 25        | ug/kg | 15  |
| trans-1,2-Dichloroethene  | ND     | 25        | ug/kg | 10  |
| Acrylonitrile             | ND     | 500       | ug/kg | 150 |
| Methyl tert-butyl ether   | ND     | 25        | ug/kg | 5.0 |
| 1,1-Dichloroethane        | 12 J   | 25        | ug/kg | 5.0 |
| Vinyl acetate             | ND     | 50        | ug/kg | 25  |
| 2,2-Dichloropropane       | ND     | 25        | ug/kg | 10  |
| cis-1,2-Dichloroethene    | 13 J   | 25        | ug/kg | 10  |
| 2-Butanone                | 580    | 120       | ug/kg | 75  |
| Bromochloromethane        | ND     | 25        | ug/kg | 5.0 |
| Chloroform                | ND     | 25        | ug/kg | 5.0 |
| Tetrahydrofuran           | ND     | 100       | ug/kg | 10  |
| 1,1,1-Trichloroethane     | 480    | 25        | ug/kg | 5.0 |
| 1,1-Dichloropropene       | ND     | 25        | ug/kg | 5.0 |
| Carbon tetrachloride      | ND     | 25        | ug/kg | 5.0 |
| Benzene                   | ND     | 25        | ug/kg | 10  |
| 1,2-Dichloroethane        | ND     | 25        | ug/kg | 5.0 |
| Trichloroethene           | 180    | 25        | ug/kg | 10  |
| 1,2-Dichloropropane       | ND     | 25        | ug/kg | 5.0 |
| Bromodichloromethane      | ND     | 25        | ug/kg | 5.0 |
| 2-Chloroethyl vinyl ether | ND     | 50        | ug/kg | 25  |
| cis-1,3-Dichloropropene   | ND     | 25        | ug/kg | 5.0 |
| 4-Methyl-2-pentanone      | 4000   | 120       | ug/kg | 50  |
| Toluene                   | 790    | 25        | ug/kg | 10  |
| trans-1,3-Dichloropropene | ND     | 25        | ug/kg | 15  |

(Continued on next page)

000026

## HALEY &amp; ALDRICH INC

Client Sample ID: SP\_38

## GC/MS Volatiles

Lot-Sample #....: E2F010157-004 Work Order #....: E2CD51AF Matrix.....: SOLID

| <u>PARAMETER</u>             | <u>RESULT</u> | REPORTING               |                        |            |
|------------------------------|---------------|-------------------------|------------------------|------------|
|                              |               | <u>LIMIT</u>            | <u>UNITS</u>           | <u>MDL</u> |
| 1,1,2-Trichloroethane        | ND            | 25                      | ug/kg                  | 15         |
| Tetrachloroethene            | ND            | 25                      | ug/kg                  | 10         |
| 2-Hexanone                   | ND            | 120                     | ug/kg                  | 50         |
| Dibromochloromethane         | ND            | 25                      | ug/kg                  | 5.0        |
| Chlorobenzene                | ND            | 25                      | ug/kg                  | 10         |
| Ethylbenzene                 | ND            | 25                      | ug/kg                  | 10         |
| Xylenes (total)              | ND            | 25                      | ug/kg                  | 15         |
| Styrene                      | ND            | 50                      | ug/kg                  | 10         |
| Bromoform                    | ND            | 25                      | ug/kg                  | 15         |
| Isopropylbenzene             | ND            | 25                      | ug/kg                  | 10         |
| p-Isopropyltoluene           | ND            | 25                      | ug/kg                  | 10         |
| Bromobenzene                 | ND            | 25                      | ug/kg                  | 10         |
| 1,1,1,2-Tetrachloroethane    | ND            | 25                      | ug/kg                  | 15         |
| 1,1,2,2-Tetrachloroethane    | ND            | 25                      | ug/kg                  | 15         |
| 1,2,3-Trichloropropane       | ND            | 25                      | ug/kg                  | 15         |
| n-Propylbenzene              | ND            | 25                      | ug/kg                  | 10         |
| 2-Chlorotoluene              | ND            | 25                      | ug/kg                  | 10         |
| 4-Chlorotoluene              | ND            | 25                      | ug/kg                  | 10         |
| 1,3,5-Trimethylbenzene       | ND            | 25                      | ug/kg                  | 10         |
| tert-Butylbenzene            | ND            | 25                      | ug/kg                  | 10         |
| 1,2,4-Trimethylbenzene       | ND            | 25                      | ug/kg                  | 10         |
| sec-Butylbenzene             | ND            | 25                      | ug/kg                  | 10         |
| 1,3-Dichlorobenzene          | ND            | 25                      | ug/kg                  | 10         |
| 1,4-Dichlorobenzene          | ND            | 25                      | ug/kg                  | 10         |
| 1,2-Dichlorobenzene          | ND            | 25                      | ug/kg                  | 10         |
| n-Butylbenzene               | ND            | 25                      | ug/kg                  | 10         |
| 1,2-Dibromo-3-chloro-propane | ND            | 50                      | ug/kg                  | 15         |
| 1,2,4-Trichloro-benzene      | ND            | 25                      | ug/kg                  | 10         |
| Hexachlorobutadiene          | ND            | 25                      | ug/kg                  | 10         |
| 1,2,3-Trichlorobenzene       | ND            | 25                      | ug/kg                  | 10         |
| t-Butanol                    | ND            | 500                     | ug/kg                  | 250        |
| Isopropyl ether              | ND            | 50                      | ug/kg                  | 5.0        |
| Tert-amyl methyl ether       | ND            | 50                      | ug/kg                  | 10         |
| Tert-butyl ethyl ether       | ND            | 50                      | ug/kg                  | 5.0        |
| <u>SURROGATE</u>             |               | <u>PERCENT RECOVERY</u> | <u>RECOVERY LIMITS</u> |            |
| Bromofluorobenzene           | 93            |                         | (65 - 135)             |            |
| 1,2-Dichloroethane-d4        | 116           |                         | (60 - 140)             |            |
| Toluene-d8                   | 95            |                         | (70 - 130)             |            |

NOTE(S) :

J Estimated result. Result is less than RL.

000027

## HALEY &amp; ALDRICH INC

SP\_38

## GC/MS Volatiles

Lot-Sample #: E2F010157-004

Work Order #: E2CD51AF

Matrix: SOLID

## MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS

| PARAMETER           | CAS # | ESTIMATED | RETENTION | UNITS |
|---------------------|-------|-----------|-----------|-------|
|                     |       | RESULT    | TIME      |       |
| Unknown alkane      |       | 110       | M 7.941   | ug/kg |
| Unknown cycloalkane |       | 290       | M 8.887   | ug/kg |
| Unknown cycloalkane |       | 67        | M 9.38    | ug/kg |
| Unknown alkane      |       | 32        | M 10.346  | ug/kg |
| Unknown cycloalkane |       | 88        | M 9.636   | ug/kg |
| Unknown alkane      |       | 55        | M 10.08   | ug/kg |
| Unknown hydrocarbon |       | 33        | M 11.607  | ug/kg |

NOTE(S) :

M: Result was measured against nearest internal standard assuming a response factor of 1.

000028

## HALEY &amp; ALDRICH INC

Client Sample ID: SP\_38

## GC Volatiles

Lot-Sample #....: E2F010157-004 Work Order #....: E2CD51AE Matrix.....: SOLID  
Date Sampled....: 05/31/02 19:08 Date Received...: 06/01/02 12:16 MS Run #.....: 2155201  
Prep Date.....: 06/03/02 Analysis Date...: 06/03/02  
Prep Batch #....: 2155360 Analysis Time...: 14:20  
Dilution Factor: 1  
Analyst ID.....: 001464 Instrument ID...: G16  
Method.....: SW846 8015B

| <u>PARAMETER</u>             | <u>REPORTING</u> |              |               |                 |
|------------------------------|------------------|--------------|---------------|-----------------|
|                              | <u>RESULT</u>    | <u>LIMIT</u> | <u>UNITS</u>  | <u>MDL</u>      |
| C6-C8                        | 5.1              | 1.0          | mg/kg         | 0.10            |
| <u>PERCENT</u>               |                  |              |               | <u>RECOVERY</u> |
| <u>SURROGATE</u>             | <u>RECOVERY</u>  |              | <u>LIMITS</u> |                 |
| a,a,a-Trifluorotoluene (TFT) | 86               |              | (60 - 130)    |                 |

000029

BOE-C6-0003307

## HALEY &amp; ALDRICH INC

Client Sample ID: SP\_38

## GC Semivolatiles

Lot-Sample #....: E2F010157-004    Work Order #....: E2CD51AD    Matrix.....: SOLID  
 Date Sampled...: 05/31/02 19:08    Date Received...: 06/01/02 12:16 MS Run #.....: 2154216  
 Prep Date.....: 06/03/02    Analysis Date...: 06/04/02  
 Prep Batch #....: 2154442    Analysis Time...: 17:27  
 Dilution Factor: 1  
 Analyst ID.....: 356074    Instrument ID...: G03  
 Method.....: SW846 8015B

| PARAMETER                | RESULT   | REPORTING |            |     |
|--------------------------|----------|-----------|------------|-----|
|                          |          | LIMIT     | UNITS      | MDL |
| C8-C9                    | ND       | 10        | mg/kg      | 2.0 |
| C10-C11                  | ND       | 10        | mg/kg      | 2.0 |
| C12-C13                  | ND       | 10        | mg/kg      | 2.0 |
| C14-C15                  | ND       | 10        | mg/kg      | 2.0 |
| C16-C17                  | ND       | 10        | mg/kg      | 2.0 |
| C18-C19                  | ND       | 10        | mg/kg      | 2.0 |
| C20-C23                  | ND       | 10        | mg/kg      | 2.0 |
| C24-C27                  | 2.1 J    | 10        | mg/kg      | 2.0 |
| C28-C31                  | ND       | 10        | mg/kg      | 2.0 |
| C32-C35                  | 3.1 J    | 10        | mg/kg      | 2.0 |
| C36-C39                  | 2.4 J    | 10        | mg/kg      | 2.0 |
| C40+                     | ND       | 10        | mg/kg      | 2.0 |
| Total Carbon Chain Range | 7.6 J    | 10        | mg/kg      | 2.0 |
| <hr/>                    |          | PERCENT   | RECOVERY   |     |
| SURROGATE                | RECOVERY |           | LIMITS     |     |
| Benzo(a)pyrene           | 83       |           | (60 - 130) |     |

NOTE(S) :

J Estimated result. Result is less than RL.

000030

**HALEY & ALDRICH INC**

Client Sample ID: SP 38

### TOTAL Metals

Lot-Sample #....: E2F010157-004 Matrix.....: SOLID  
Date Sampled...: 05/31/02 19:08 Date Received...: 06/01/02 12:16

| PARAMETER                        | RESULT   | REPORTING<br>LIMIT    | UNITS | METHOD                  | PREPARATION-<br>ANALYSIS DATE | WORK<br>ORDER # |
|----------------------------------|----------|-----------------------|-------|-------------------------|-------------------------------|-----------------|
| <b>Prep Batch #....: 2154211</b> |          |                       |       |                         |                               |                 |
| Aluminum                         | 8510     | 20.0                  | mg/kg | SW846 6010B             | 06/03-06/04/02                | E2CD51AG        |
|                                  |          | Dilution Factor: 1    |       | Analysis Time...: 12:17 | Analyst ID.....: 021088       |                 |
|                                  |          | Instrument ID...: M01 |       | MS Run #.....: 2154078  | MDL.....: 8.0                 |                 |
| Arsenic                          | 3.0      | 1.0                   | mg/kg | SW846 6010B             | 06/03-06/04/02                | E2CD51AH        |
|                                  |          | Dilution Factor: 1    |       | Analysis Time...: 12:17 | Analyst ID.....: 021088       |                 |
|                                  |          | Instrument ID...: M01 |       | MS Run #.....: 2154078  | MDL.....: 0.40                |                 |
| Antimony                         | ND       | 6.0                   | mg/kg | SW846 6010B             | 06/03-06/04/02                | E2CD51AJ        |
|                                  |          | Dilution Factor: 1    |       | Analysis Time...: 12:17 | Analyst ID.....: 021088       |                 |
|                                  |          | Instrument ID...: M01 |       | MS Run #.....: 2154078  | MDL.....: 0.60                |                 |
| Barium                           | 63.0 J   | 2.0                   | mg/kg | SW846 6010B             | 06/03-06/04/02                | E2CD51AK        |
|                                  |          | Dilution Factor: 1    |       | Analysis Time...: 12:17 | Analyst ID.....: 021088       |                 |
|                                  |          | Instrument ID...: M01 |       | MS Run #.....: 2154078  | MDL.....: 0.10                |                 |
| Cadmium                          | 0.11 B,J | 0.50                  | mg/kg | SW846 6010B             | 06/03-06/04/02                | E2CD51AL        |
|                                  |          | Dilution Factor: 1    |       | Analysis Time...: 12:17 | Analyst ID.....: 021088       |                 |
|                                  |          | Instrument ID...: M01 |       | MS Run #.....: 2154078  | MDL.....: 0.060               |                 |
| Chromium                         | 19.2     | 1.0                   | mg/kg | SW846 6010B             | 06/03-06/04/02                | E2CD51AM        |
|                                  |          | Dilution Factor: 1    |       | Analysis Time...: 12:17 | Analyst ID.....: 021088       |                 |
|                                  |          | Instrument ID...: M01 |       | MS Run #.....: 2154078  | MDL.....: 0.10                |                 |
| Beryllium                        | 0.34 B   | 0.50                  | mg/kg | SW846 6010B             | 06/03-06/04/02                | E2CD51AN        |
|                                  |          | Dilution Factor: 1    |       | Analysis Time...: 12:17 | Analyst ID.....: 021088       |                 |
|                                  |          | Instrument ID...: M01 |       | MS Run #.....: 2154078  | MDL.....: 0.050               |                 |
| Lead                             | 4.3      | 0.50                  | mg/kg | SW846 6010B             | 06/03-06/04/02                | E2CD51AP        |
|                                  |          | Dilution Factor: 1    |       | Analysis Time...: 12:17 | Analyst ID.....: 021088       |                 |
|                                  |          | Instrument ID...: M01 |       | MS Run #.....: 2154078  | MDL.....: 0.30                |                 |
| Selenium                         | 0.61     | 0.50                  | mg/kg | SW846 6010B             | 06/03-06/04/02                | E2CD51AQ        |
|                                  |          | Dilution Factor: 1    |       | Analysis Time...: 12:17 | Analyst ID.....: 021088       |                 |
|                                  |          | Instrument ID...: M01 |       | MS Run #.....: 2154078  | MDL.....: 0.40                |                 |

(Continued on next page)

**000031**

## HALEY &amp; ALDRICH INC

Client Sample ID: SP\_38

## TOTAL Metals

Lot-Sample #....: E2F010157-004

Matrix.....: SOLID

| PARAMETER         | RESULT   | REPORTING             |       |  | METHOD                  | PREPARATION-   | WORK                    | ORDER # |
|-------------------|----------|-----------------------|-------|--|-------------------------|----------------|-------------------------|---------|
|                   |          | LIMIT                 | UNITS |  |                         |                |                         |         |
| Silver            | ND       | 1.0                   | mg/kg |  | SW846 6010B             | 06/03-06/04/02 | E2CD51AR                |         |
|                   |          | Dilution Factor: 1    |       |  | Analysis Time...: 12:17 |                | Analyst ID.....: 021088 |         |
|                   |          | Instrument ID...: M01 |       |  | MS Run #.....: 2154078  |                | MDL.....: 0.10          |         |
| Cobalt            | 4.2 B    | 5.0                   | mg/kg |  | SW846 6010B             | 06/03-06/04/02 | E2CD51AT                |         |
|                   |          | Dilution Factor: 1    |       |  | Analysis Time...: 12:17 |                | Analyst ID.....: 021088 |         |
|                   |          | Instrument ID...: M01 |       |  | MS Run #.....: 2154078  |                | MDL.....: 0.10          |         |
| Copper            | 10.1     | 2.5                   | mg/kg |  | SW846 6010B             | 06/03-06/04/02 | E2CD51AU                |         |
|                   |          | Dilution Factor: 1    |       |  | Analysis Time...: 12:17 |                | Analyst ID.....: 021088 |         |
|                   |          | Instrument ID...: M01 |       |  | MS Run #.....: 2154078  |                | MDL.....: 0.40          |         |
| Molybdenum        | 0.63 B,J | 4.0                   | mg/kg |  | SW846 6010B             | 06/03-06/04/02 | E2CD51AV                |         |
|                   |          | Dilution Factor: 1    |       |  | Analysis Time...: 12:17 |                | Analyst ID.....: 021088 |         |
|                   |          | Instrument ID...: M01 |       |  | MS Run #.....: 2154078  |                | MDL.....: 0.30          |         |
| Nickel            | 9.1      | 4.0                   | mg/kg |  | SW846 6010B             | 06/03-06/04/02 | E2CD51AW                |         |
|                   |          | Dilution Factor: 1    |       |  | Analysis Time...: 12:17 |                | Analyst ID.....: 021088 |         |
|                   |          | Instrument ID...: M01 |       |  | MS Run #.....: 2154078  |                | MDL.....: 0.30          |         |
| Thallium          | ND       | 1.0                   | mg/kg |  | SW846 6010B             | 06/03-06/04/02 | E2CD51AX                |         |
|                   |          | Dilution Factor: 1    |       |  | Analysis Time...: 12:17 |                | Analyst ID.....: 021088 |         |
|                   |          | Instrument ID...: M01 |       |  | MS Run #.....: 2154078  |                | MDL.....: 0.80          |         |
| Vanadium          | 21.7     | 5.0                   | mg/kg |  | SW846 6010B             | 06/03-06/04/02 | E2CD51A0                |         |
|                   |          | Dilution Factor: 1    |       |  | Analysis Time...: 12:17 |                | Analyst ID.....: 021088 |         |
|                   |          | Instrument ID...: M01 |       |  | MS Run #.....: 2154078  |                | MDL.....: 0.10          |         |
| Zinc              | 31.0     | 2.0                   | mg/kg |  | SW846 6010B             | 06/03-06/04/02 | E2CD51A1                |         |
|                   |          | Dilution Factor: 1    |       |  | Analysis Time...: 12:17 |                | Analyst ID.....: 021088 |         |
|                   |          | Instrument ID...: M01 |       |  | MS Run #.....: 2154078  |                | MDL.....: 1.0           |         |
| Prep Batch #....: | 2154215  |                       |       |  |                         |                |                         |         |
| Mercury           | 0.028 B  | 0.10                  | mg/kg |  | SW846 7471A             | 06/03-06/07/02 | E2CD51AA                |         |
|                   |          | Dilution Factor: 1    |       |  | Analysis Time...: 09:28 |                | Analyst ID.....: 000023 |         |
|                   |          | Instrument ID...: M04 |       |  | MS Run #.....: 2154083  |                | MDL.....: 0.020         |         |

## NOTE(S) :

J Method blank contamination. The associated method blank contains the target analyte at a reportable level.

B Estimated result. Result is less than RL.

000032

SEVERN  
TRENT  
SERVICES

QA/QC

000033

# QC DATA ASSOCIATION SUMMARY

E2F010157

## Sample Preparation and Analysis Control Numbers

| <u>SAMPLE#</u> | <u>MATRIX</u> | <u>ANALYTICAL<br/>METHOD</u> | <u>LEACH<br/>BATCH #</u> | <u>PREP<br/>BATCH #</u> | <u>MS RUN#</u> |
|----------------|---------------|------------------------------|--------------------------|-------------------------|----------------|
| 001            | WATER         | SW846 8260B                  |                          | 2155393                 | 2155243        |
| 002            | SOLID         | SW846 8015B                  |                          | 2154442                 | 2154216        |
|                | SOLID         | SW846 8015B                  |                          | 2155360                 | 2155201        |
|                | SOLID         | SW846 7471A                  |                          | 2154215                 | 2154083        |
|                | SOLID         | SW846 8260B                  |                          | 2156314                 | 2156145        |
|                | SOLID         | SW846 6010B                  |                          | 2154211                 | 2154078        |
| 003            | SOLID         | SW846 8015B                  |                          | 2154442                 | 2154216        |
|                | SOLID         | SW846 8015B                  |                          | 2155360                 | 2155201        |
|                | SOLID         | SW846 7471A                  |                          | 2154215                 | 2154083        |
|                | SOLID         | SW846 8260B                  |                          | 2156314                 | 2156145        |
|                | SOLID         | SW846 6010B                  |                          | 2154211                 | 2154078        |
| 004            | SOLID         | SW846 8015B                  |                          | 2154442                 | 2154216        |
|                | SOLID         | SW846 8015B                  |                          | 2155360                 | 2155201        |
|                | SOLID         | SW846 7471A                  |                          | 2154215                 | 2154083        |
|                | SOLID         | SW846 8260B                  |                          | 2155254                 | 2155104        |
|                | SOLID         | SW846 6010B                  |                          | 2154211                 | 2154078        |

000034

BOE-C6-0003312

## METHOD BLANK REPORT

## GC/MS Volatiles

Client Lot #....: E2F010157  
 MB Lot-Sample #: E2F040000-254  
 Analysis Date...: 06/03/02  
 Dilution Factor: 1

Work Order #....: E2EKT1AA  
 Prep Date.....: 06/03/02  
 Prep Batch #: 2155254  
 Analyst ID.....: 064667

Matrix.....: SOLID  
 Analysis Time...: 17:44  
 Instrument ID...: MSD

| PARAMETER                 | RESULT | REPORTING |       |             |
|---------------------------|--------|-----------|-------|-------------|
|                           |        | LIMIT     | UNITS | METHOD      |
| Dichlorodifluoromethane   | ND     | 10        | ug/kg | SW846 8260B |
| Chloromethane             | ND     | 10        | ug/kg | SW846 8260B |
| Vinyl chloride            | ND     | 10        | ug/kg | SW846 8260B |
| Bromomethane              | ND     | 10        | ug/kg | SW846 8260B |
| 1,2-Dibromoethane         | ND     | 5.0       | ug/kg | SW846 8260B |
| Chloroethane              | ND     | 10        | ug/kg | SW846 8260B |
| Trichlorofluoromethane    | ND     | 10        | ug/kg | SW846 8260B |
| Acrolein                  | ND     | 100       | ug/kg | SW846 8260B |
| 1,1-Dichloroethene        | ND     | 5.0       | ug/kg | SW846 8260B |
| Iodomethane               | ND     | 10        | ug/kg | SW846 8260B |
| Acetone                   | ND     | 25        | ug/kg | SW846 8260B |
| Carbon disulfide          | ND     | 5.0       | ug/kg | SW846 8260B |
| Methylene chloride        | ND     | 5.0       | ug/kg | SW846 8260B |
| trans-1,2-Dichloroethene  | ND     | 5.0       | ug/kg | SW846 8260B |
| Acrylonitrile             | ND     | 100       | ug/kg | SW846 8260B |
| Methyl tert-butyl ether   | ND     | 5.0       | ug/kg | SW846 8260B |
| 1,1-Dichloroethane        | ND     | 5.0       | ug/kg | SW846 8260B |
| Vinyl acetate             | ND     | 10        | ug/kg | SW846 8260B |
| 2,2-Dichloropropane       | ND     | 5.0       | ug/kg | SW846 8260B |
| cis-1,2-Dichloroethene    | ND     | 5.0       | ug/kg | SW846 8260B |
| 2-Butanone                | ND     | 25        | ug/kg | SW846 8260B |
| Bromochloromethane        | ND     | 5.0       | ug/kg | SW846 8260B |
| Chloroform                | ND     | 5.0       | ug/kg | SW846 8260B |
| Tetrahydrofuran           | ND     | 20        | ug/kg | SW846 8260B |
| 1,1,1-Trichloroethane     | ND     | 5.0       | ug/kg | SW846 8260B |
| 1,1-Dichloropropene       | ND     | 5.0       | ug/kg | SW846 8260B |
| Carbon tetrachloride      | ND     | 5.0       | ug/kg | SW846 8260B |
| Benzene                   | ND     | 5.0       | ug/kg | SW846 8260B |
| 1,2-Dichloroethane        | ND     | 5.0       | ug/kg | SW846 8260B |
| Trichloroethene           | ND     | 5.0       | ug/kg | SW846 8260B |
| 1,2-Dichloropropane       | ND     | 5.0       | ug/kg | SW846 8260B |
| Bromodichloromethane      | ND     | 5.0       | ug/kg | SW846 8260B |
| 2-Chloroethyl vinyl ether | ND     | 10        | ug/kg | SW846 8260B |
| cis-1,3-Dichloropropene   | ND     | 5.0       | ug/kg | SW846 8260B |
| 4-Methyl-2-pentanone      | ND     | 25        | ug/kg | SW846 8260B |
| Toluene                   | ND     | 5.0       | ug/kg | SW846 8260B |
| trans-1,3-Dichloropropene | ND     | 5.0       | ug/kg | SW846 8260B |
| 1,1,2-Trichloroethane     | ND     | 5.0       | ug/kg | SW846 8260B |
| Tetrachloroethene         | ND     | 5.0       | ug/kg | SW846 8260B |
| 2-Hexanone                | ND     | 25        | ug/kg | SW846 8260B |

(Continued on next page)

000035

## METHOD BLANK REPORT

## GC/MS Volatiles

Client Lot #....: E2F010157

Work Order #....: E2EKT1AA

Matrix.....: SOLID

| <u>PARAMETER</u>             | <u>RESULT</u> | REPORTING       |                 |               |
|------------------------------|---------------|-----------------|-----------------|---------------|
|                              |               | <u>LIMIT</u>    | <u>UNITS</u>    | <u>METHOD</u> |
| Dibromochloromethane         | ND            | 5.0             | ug/kg           | SW846 8260B   |
| Chlorobenzene                | ND            | 5.0             | ug/kg           | SW846 8260B   |
| Ethylbenzene                 | ND            | 5.0             | ug/kg           | SW846 8260B   |
| Xylenes (total)              | ND            | 5.0             | ug/kg           | SW846 8260B   |
| Styrene                      | ND            | 10              | ug/kg           | SW846 8260B   |
| Bromoform                    | ND            | 5.0             | ug/kg           | SW846 8260B   |
| Isopropylbenzene             | ND            | 5.0             | ug/kg           | SW846 8260B   |
| p-Isopropyltoluene           | ND            | 5.0             | ug/kg           | SW846 8260B   |
| Bromobenzene                 | ND            | 5.0             | ug/kg           | SW846 8260B   |
| 1,1,1,2-Tetrachloroethane    | ND            | 5.0             | ug/kg           | SW846 8260B   |
| 1,1,2,2-Tetrachloroethane    | ND            | 5.0             | ug/kg           | SW846 8260B   |
| 1,2,3-Trichloropropane       | ND            | 5.0             | ug/kg           | SW846 8260B   |
| n-Propylbenzene              | ND            | 5.0             | ug/kg           | SW846 8260B   |
| 2-Chlorotoluene              | ND            | 5.0             | ug/kg           | SW846 8260B   |
| 4-Chlorotoluene              | ND            | 5.0             | ug/kg           | SW846 8260B   |
| 1,3,5-Trimethylbenzene       | ND            | 5.0             | ug/kg           | SW846 8260B   |
| tert-Butylbenzene            | ND            | 5.0             | ug/kg           | SW846 8260B   |
| 1,2,4-Trimethylbenzene       | ND            | 5.0             | ug/kg           | SW846 8260B   |
| sec-Butylbenzene             | ND            | 5.0             | ug/kg           | SW846 8260B   |
| 1,3-Dichlorobenzene          | ND            | 5.0             | ug/kg           | SW846 8260B   |
| 1,4-Dichlorobenzene          | ND            | 5.0             | ug/kg           | SW846 8260B   |
| 1,2-Dichlorobenzene          | ND            | 5.0             | ug/kg           | SW846 8260B   |
| n-Butylbenzene               | ND            | 5.0             | ug/kg           | SW846 8260B   |
| 1,2-Dibromo-3-chloro-propane | ND            | 10              | ug/kg           | SW846 8260B   |
| 1,2,4-Trichloro-benzene      | ND            | 5.0             | ug/kg           | SW846 8260B   |
| Hexachlorobutadiene          | ND            | 5.0             | ug/kg           | SW846 8260B   |
| 1,2,3-Trichlorobenzene       | ND            | 5.0             | ug/kg           | SW846 8260B   |
| t-Butanol                    | ND            | 100             | ug/kg           | SW846 8260B   |
| Isopropyl ether              | ND            | 10              | ug/kg           | SW846 8260B   |
| Tert-amyl methyl ether       | ND            | 10              | ug/kg           | SW846 8260B   |
| Tert-butyl ethyl ether       | ND            | 10              | ug/kg           | SW846 8260B   |
| <u>SURROGATE</u>             |               | <u>PERCENT</u>  | <u>RECOVERY</u> |               |
|                              |               | <u>RECOVERY</u> | <u>LIMITS</u>   |               |
| Bromofluorobenzene           | 106           | (65 - 135)      |                 |               |
| 1,2-Dichloroethane-d4        | 110           | (60 - 140)      |                 |               |
| Toluene-d8                   | 114           | (70 - 130)      |                 |               |

## NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

000036

HALEY & ALDRICH INC

Method Blank Report

GC/MS Volatiles

Lot-Sample #: E2F040000-254 B Work Order #: E2EKT1AA

Matrix: SOLID

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS

| <u>PARAMETER</u> | <u>CAS #</u> | <u>ESTIMATED<br/>RESULT</u> | <u>RETENTION<br/>TIME</u> | <u>UNITS</u> |
|------------------|--------------|-----------------------------|---------------------------|--------------|
| None             |              |                             |                           | ug/kg        |

000037

BOE-C6-0003315

## METHOD BLANK REPORT

## GC/MS Volatiles

Client Lot #....: E2F010157  
 MB Lot-Sample #: E2F040000-393  
 Analysis Date...: 06/03/02  
 Dilution Factor: 1

Work Order #....: E2FFC1AA  
 Prep Date.....: 06/03/02  
 Prep Batch #:....: 2155393  
 Analyst ID.....: 004648

Matrix.....: WATER  
 Analysis Time...: 20:54  
 Instrument ID.: MSC

| PARAMETER                 | RESULT | REPORTING |       |             |
|---------------------------|--------|-----------|-------|-------------|
|                           |        | LIMIT     | UNITS | METHOD      |
| Dichlorodifluoromethane   | ND     | 1.0       | ug/L  | SW846 8260B |
| Chloromethane             | ND     | 2.0       | ug/L  | SW846 8260B |
| Vinyl chloride            | ND     | 0.50      | ug/L  | SW846 8260B |
| Chloroethane              | ND     | 2.0       | ug/L  | SW846 8260B |
| Bromomethane              | ND     | 2.0       | ug/L  | SW846 8260B |
| Trichlorofluoromethane    | ND     | 2.0       | ug/L  | SW846 8260B |
| 1,1-Dichloroethene        | ND     | 1.0       | ug/L  | SW846 8260B |
| Methylene chloride        | ND     | 1.0       | ug/L  | SW846 8260B |
| Methyl tert-butyl ether   | ND     | 1.0       | ug/L  | SW846 8260B |
| Carbon disulfide          | ND     | 1.0       | ug/L  | SW846 8260B |
| Acetone                   | ND     | 10        | ug/L  | SW846 8260B |
| trans-1,2-Dichloroethene  | ND     | 1.0       | ug/L  | SW846 8260B |
| 1,1-Dichloroethane        | ND     | 1.0       | ug/L  | SW846 8260B |
| 2,2-Dichloropropane       | ND     | 1.0       | ug/L  | SW846 8260B |
| cis-1,2-Dichloroethene    | ND     | 1.0       | ug/L  | SW846 8260B |
| Chloroform                | ND     | 1.0       | ug/L  | SW846 8260B |
| Bromochloromethane        | ND     | 1.0       | ug/L  | SW846 8260B |
| 1,1,1-Trichloroethane     | ND     | 1.0       | ug/L  | SW846 8260B |
| 2-Butanone                | ND     | 5.0       | ug/L  | SW846 8260B |
| 1,1-Dichloropropene       | ND     | 1.0       | ug/L  | SW846 8260B |
| Carbon tetrachloride      | ND     | 0.50      | ug/L  | SW846 8260B |
| 1,2-Dibromoethane         | ND     | 1.0       | ug/L  | SW846 8260B |
| Benzene                   | ND     | 1.0       | ug/L  | SW846 8260B |
| Trichloroethene           | ND     | 1.0       | ug/L  | SW846 8260B |
| Bromodichloromethane      | ND     | 1.0       | ug/L  | SW846 8260B |
| 4-Methyl-2-pentanone      | ND     | 5.0       | ug/L  | SW846 8260B |
| Toluene                   | ND     | 1.0       | ug/L  | SW846 8260B |
| 1,1,2-Trichloroethane     | ND     | 1.0       | ug/L  | SW846 8260B |
| 1,2-Dichloroethane        | ND     | 0.50      | ug/L  | SW846 8260B |
| Tetrachloroethene         | ND     | 1.0       | ug/L  | SW846 8260B |
| 2-Hexanone                | ND     | 5.0       | ug/L  | SW846 8260B |
| Dibromochloromethane      | ND     | 1.0       | ug/L  | SW846 8260B |
| Chlorobenzene             | ND     | 1.0       | ug/L  | SW846 8260B |
| 1,1,1,2-Tetrachloroethane | ND     | 1.0       | ug/L  | SW846 8260B |
| Ethylbenzene              | ND     | 1.0       | ug/L  | SW846 8260B |
| Xylenes (total)           | ND     | 1.0       | ug/L  | SW846 8260B |
| Styrene                   | ND     | 1.0       | ug/L  | SW846 8260B |
| Bromoform                 | ND     | 1.0       | ug/L  | SW846 8260B |
| Isopropylbenzene          | ND     | 1.0       | ug/L  | SW846 8260B |
| 1,1,2,2-Tetrachloroethane | ND     | 1.0       | ug/L  | SW846 8260B |

(Continued on next page)

000038

## METHOD BLANK REPORT

## GC/MS Volatiles

Client Lot #....: E2F010157

Work Order #....: E2FFC1AA

Matrix.....: WATER

| <u>PARAMETER</u>                 | <u>RESULT</u>               | <u>REPORTING<br/>LIMIT</u> | <u>UNITS</u> | <u>METHOD</u> |
|----------------------------------|-----------------------------|----------------------------|--------------|---------------|
| 1,2,3-Trichloropropane           | ND                          | 1.0                        | ug/L         | SW846 8260B   |
| n-Propylbenzene                  | ND                          | 1.0                        | ug/L         | SW846 8260B   |
| Bromobenzene                     | ND                          | 1.0                        | ug/L         | SW846 8260B   |
| 1,3,5-Trimethylbenzene           | ND                          | 1.0                        | ug/L         | SW846 8260B   |
| 2-Chlorotoluene                  | ND                          | 1.0                        | ug/L         | SW846 8260B   |
| 4-Chlorotoluene                  | ND                          | 1.0                        | ug/L         | SW846 8260B   |
| tert-Butylbenzene                | ND                          | 1.0                        | ug/L         | SW846 8260B   |
| 1,2,4-Trimethylbenzene           | ND                          | 1.0                        | ug/L         | SW846 8260B   |
| sec-Butylbenzene                 | ND                          | 1.0                        | ug/L         | SW846 8260B   |
| p-Isopropyltoluene               | ND                          | 1.0                        | ug/L         | SW846 8260B   |
| 1,3-Dichlorobenzene              | ND                          | 1.0                        | ug/L         | SW846 8260B   |
| 1,4-Dichlorobenzene              | ND                          | 1.0                        | ug/L         | SW846 8260B   |
| n-Butylbenzene                   | ND                          | 1.0                        | ug/L         | SW846 8260B   |
| 1,2-Dichlorobenzene              | ND                          | 1.0                        | ug/L         | SW846 8260B   |
| 1,2-Dibromo-3-chloro-<br>propane | ND                          | 2.0                        | ug/L         | SW846 8260B   |
| 1,2,4-Trichloro-<br>benzene      | ND                          | 1.0                        | ug/L         | SW846 8260B   |
| Hexachlorobutadiene              | ND                          | 1.0                        | ug/L         | SW846 8260B   |
| 1,2,3-Trichlorobenzene           | ND                          | 1.0                        | ug/L         | SW846 8260B   |
| Acrolein                         | ND                          | 20                         | ug/L         | SW846 8260B   |
| Tert-amyl methyl ether           | ND                          | 2.0                        | ug/L         | SW846 8260B   |
| Acrylonitrile                    | ND                          | 20                         | ug/L         | SW846 8260B   |
| Tert-butyl ethyl ether           | ND                          | 2.0                        | ug/L         | SW846 8260B   |
| t-Butanol                        | ND                          | 25                         | ug/L         | SW846 8260B   |
| Iodomethane                      | ND                          | 2.0                        | ug/L         | SW846 8260B   |
| Isopropyl ether                  | ND                          | 2.0                        | ug/L         | SW846 8260B   |
| 2-Chloroethyl vinyl ether        | ND                          | 5.0                        | ug/L         | SW846 8260B   |
| Tetrahydrofuran                  | ND                          | 10                         | ug/L         | SW846 8260B   |
| Vinyl acetate                    | ND                          | 5.0                        | ug/L         | SW846 8260B   |
| <u>SURROGATE</u>                 | <u>PERCENT<br/>RECOVERY</u> | <u>RECOVERY<br/>LIMITS</u> |              |               |
| Bromofluorobenzene               | 101                         | (75 - 130)                 |              |               |
| 1,2-Dichloroethane-d4            | 101                         | (65 - 135)                 |              |               |
| Toluene-d8                       | 100                         | (80 - 130)                 |              |               |

## NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

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BOE-C6-0003317

HALEY & ALDRICH INC

Method Blank Report

GC/MS Volatiles

Lot-Sample #: E2F040000-393 B Work Order #: E2FFC1AA Matrix: WATER

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS

| <u>PARAMETER</u> | <u>CAS #</u> | <u>ESTIMATED<br/>RESULT</u> | <u>RETENTION<br/>TIME</u> | <u>UNITS</u> |
|------------------|--------------|-----------------------------|---------------------------|--------------|
| None             |              |                             |                           | ug/L         |

000040

## METHOD BLANK REPORT

## GC/MS Volatiles

Client Lot #....: E2F010157  
 MB Lot-Sample #: E2F050000-314  
 Analysis Date...: 06/04/02  
 Dilution Factor: 1

Work Order #....: E2GXH1AA  
 Prep Date.....: 06/04/02  
 Prep Batch #....: 2156314  
 Analyst ID.....: 064667

Matrix.....: SOLID  
 Analysis Time.: 12:05  
 Instrument ID.: MSD

| <u>PARAMETER</u>          | <u>RESULT</u> | <u>REPORTING<br/>LIMIT</u> | <u>UNITS</u> | <u>METHOD</u> |
|---------------------------|---------------|----------------------------|--------------|---------------|
| Dichlorodifluoromethane   | ND            | 10                         | ug/kg        | SW846 8260B   |
| Chloromethane             | ND            | 10                         | ug/kg        | SW846 8260B   |
| Vinyl chloride            | ND            | 10                         | ug/kg        | SW846 8260B   |
| Bromomethane              | ND            | 10                         | ug/kg        | SW846 8260B   |
| 1,2-Dibromoethane         | ND            | 5.0                        | ug/kg        | SW846 8260B   |
| Chloroethane              | ND            | 10                         | ug/kg        | SW846 8260B   |
| Trichlorofluoromethane    | ND            | 10                         | ug/kg        | SW846 8260B   |
| Acrolein                  | ND            | 100                        | ug/kg        | SW846 8260B   |
| 1,1-Dichloroethene        | ND            | 5.0                        | ug/kg        | SW846 8260B   |
| Iodomethane               | ND            | 10                         | ug/kg        | SW846 8260B   |
| Acetone                   | ND            | 25                         | ug/kg        | SW846 8260B   |
| Carbon disulfide          | ND            | 5.0                        | ug/kg        | SW846 8260B   |
| Methylene chloride        | ND            | 5.0                        | ug/kg        | SW846 8260B   |
| trans-1,2-Dichloroethene  | ND            | 5.0                        | ug/kg        | SW846 8260B   |
| Acrylonitrile             | ND            | 100                        | ug/kg        | SW846 8260B   |
| Methyl tert-butyl ether   | ND            | 5.0                        | ug/kg        | SW846 8260B   |
| 1,1-Dichloroethane        | ND            | 5.0                        | ug/kg        | SW846 8260B   |
| Vinyl acetate             | ND            | 10                         | ug/kg        | SW846 8260B   |
| 2,2-Dichloropropane       | ND            | 5.0                        | ug/kg        | SW846 8260B   |
| cis-1,2-Dichloroethene    | ND            | 5.0                        | ug/kg        | SW846 8260B   |
| 2-Butanone                | ND            | 25                         | ug/kg        | SW846 8260B   |
| Bromochloromethane        | ND            | 5.0                        | ug/kg        | SW846 8260B   |
| Chloroform                | ND            | 5.0                        | ug/kg        | SW846 8260B   |
| Tetrahydrofuran           | ND            | 20                         | ug/kg        | SW846 8260B   |
| 1,1,1-Trichloroethane     | ND            | 5.0                        | ug/kg        | SW846 8260B   |
| 1,1-Dichloropropene       | ND            | 5.0                        | ug/kg        | SW846 8260B   |
| Carbon tetrachloride      | ND            | 5.0                        | ug/kg        | SW846 8260B   |
| Benzene                   | ND            | 5.0                        | ug/kg        | SW846 8260B   |
| 1,2-Dichloroethane        | ND            | 5.0                        | ug/kg        | SW846 8260B   |
| Trichloroethene           | ND            | 5.0                        | ug/kg        | SW846 8260B   |
| 1,2-Dichloropropane       | ND            | 5.0                        | ug/kg        | SW846 8260B   |
| Bromodichloromethane      | ND            | 5.0                        | ug/kg        | SW846 8260B   |
| 2-Chloroethyl vinyl ether | ND            | 10                         | ug/kg        | SW846 8260B   |
| cis-1,3-Dichloropropene   | ND            | 5.0                        | ug/kg        | SW846 8260B   |
| 4-Methyl-2-pentanone      | ND            | 25                         | ug/kg        | SW846 8260B   |
| Toluene                   | ND            | 5.0                        | ug/kg        | SW846 8260B   |
| trans-1,3-Dichloropropene | ND            | 5.0                        | ug/kg        | SW846 8260B   |
| 1,1,2-Trichloroethane     | ND            | 5.0                        | ug/kg        | SW846 8260B   |
| Tetrachloroethene         | ND            | 5.0                        | ug/kg        | SW846 8260B   |
| 2-Hexanone                | ND            | 25                         | ug/kg        | SW846 8260B   |

(Continued on next page)

**000041**

## METHOD BLANK REPORT

## GC/MS Volatiles

Client Lot #....: E2F010157

Work Order #....: E2GXH1AA

Matrix.....: SOLID

| PARAMETER                    | RESULT | REPORTING |       | METHOD      |
|------------------------------|--------|-----------|-------|-------------|
|                              |        | LIMIT     | UNITS |             |
| Dibromochloromethane         | ND     | 5.0       | ug/kg | SW846 8260B |
| Chlorobenzene                | ND     | 5.0       | ug/kg | SW846 8260B |
| Ethylbenzene                 | ND     | 5.0       | ug/kg | SW846 8260B |
| Xylenes (total)              | ND     | 5.0       | ug/kg | SW846 8260B |
| Styrene                      | ND     | 10        | ug/kg | SW846 8260B |
| Bromoform                    | ND     | 5.0       | ug/kg | SW846 8260B |
| Isopropylbenzene             | ND     | 5.0       | ug/kg | SW846 8260B |
| p-Isopropyltoluene           | ND     | 5.0       | ug/kg | SW846 8260B |
| Bromobenzene                 | ND     | 5.0       | ug/kg | SW846 8260B |
| 1,1,1,2-Tetrachloroethane    | ND     | 5.0       | ug/kg | SW846 8260B |
| 1,1,2,2-Tetrachloroethane    | ND     | 5.0       | ug/kg | SW846 8260B |
| 1,2,3-Trichloropropane       | ND     | 5.0       | ug/kg | SW846 8260B |
| n-Propylbenzene              | ND     | 5.0       | ug/kg | SW846 8260B |
| 2-Chlorotoluene              | ND     | 5.0       | ug/kg | SW846 8260B |
| 4-Chlorotoluene              | ND     | 5.0       | ug/kg | SW846 8260B |
| 1,3,5-Trimethylbenzene       | ND     | 5.0       | ug/kg | SW846 8260B |
| tert-Butylbenzene            | ND     | 5.0       | ug/kg | SW846 8260B |
| 1,2,4-Trimethylbenzene       | ND     | 5.0       | ug/kg | SW846 8260B |
| sec-Butylbenzene             | ND     | 5.0       | ug/kg | SW846 8260B |
| 1,3-Dichlorobenzene          | ND     | 5.0       | ug/kg | SW846 8260B |
| 1,4-Dichlorobenzene          | ND     | 5.0       | ug/kg | SW846 8260B |
| 1,2-Dichlorobenzene          | ND     | 5.0       | ug/kg | SW846 8260B |
| n-Butylbenzene               | ND     | 5.0       | ug/kg | SW846 8260B |
| 1,2-Dibromo-3-chloro-propane | ND     | 10        | ug/kg | SW846 8260B |
| 1,2,4-Trichloro-benzene      | ND     | 5.0       | ug/kg | SW846 8260B |
| Hexachlorobutadiene          | ND     | 5.0       | ug/kg | SW846 8260B |
| 1,2,3-Trichlorobenzene       | ND     | 5.0       | ug/kg | SW846 8260B |
| t-Butanol                    | ND     | 100       | ug/kg | SW846 8260B |
| Isopropyl ether              | ND     | 10        | ug/kg | SW846 8260B |
| Tert-amyl methyl ether       | ND     | 10        | ug/kg | SW846 8260B |
| Tert-butyl ethyl ether       | ND     | 10        | ug/kg | SW846 8260B |

| SURROGATE             | PERCENT<br>RECOVERY | RECOVERY |        |
|-----------------------|---------------------|----------|--------|
|                       |                     | LIMITS   |        |
| Bromofluorobenzene    | 109                 | (65      | - 135) |
| 1,2-Dichloroethane-d4 | 123                 | (60      | - 140) |
| Toluene-d8            | 118                 | (70      | - 130) |

## NOTE (S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

000042

HALEY & ALDRICH INC

Method Blank Report

GC/MS Volatiles

Lot-Sample #: E2F050000-314 B Work Order #: E2GXH1AA Matrix: SOLID

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS

| <u>PARAMETER</u> | <u>CAS #</u> | <u>ESTIMATED<br/>RESULT</u> | <u>RETENTION<br/>TIME</u> | <u>UNITS</u> |
|------------------|--------------|-----------------------------|---------------------------|--------------|
| None             |              |                             |                           | ug/kg        |

000043

METHOD BLANK REPORT

GC Volatiles

Client Lot #...: E2F010157  
MB Lot-Sample #: E2F040000-360  
Analysis Date..: 06/03/02  
Dilution Factor: 1

Work Order #...: E2E861AA  
Prep Date.....: 06/03/02  
Prep Batch #: 2155360  
Analyst ID.....: 001464

Matrix.....: SOLID  
Analysis Time.: 11:53  
Instrument ID.: G16

| PARAMETER                       | RESULT   | REPORTING  |       | METHOD      |
|---------------------------------|----------|------------|-------|-------------|
|                                 |          | LIMIT      | UNITS |             |
| C6-C8                           | ND       | 1.0        | mg/kg | SW846 8015B |
| SURROGATE                       | PERCENT  | RECOVERY   |       |             |
| a,a,a-Trifluorotoluene<br>(TFT) | RECOVERY | LIMITS     |       |             |
|                                 | 72       | (60 - 130) |       |             |

NOTE (S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

**000044**

## METHOD BLANK REPORT

## GC Semivolatiles

Client Lot #....: E2F010157  
 MB Lot-Sample #: E2F030000-442  
 Analysis Date...: 06/04/02  
 Dilution Factor: 1

Work Order #....: E2DRK1AA  
 Prep Date.....: 06/03/02  
 Prep Batch #....: 2154442  
 Analyst ID.....: 356074

Matrix.....: SOLID  
 Analysis Time...: 16:32  
 Instrument ID..: G02

| <u>PARAMETER</u>         | <u>RESULT</u> | <u>REPORTING</u> |                 |               |
|--------------------------|---------------|------------------|-----------------|---------------|
|                          |               | <u>LIMIT</u>     | <u>UNITS</u>    | <u>METHOD</u> |
| C8-C9                    | ND            | 10               | mg/kg           | SW846 8015B   |
| C10-C11                  | ND            | 10               | mg/kg           | SW846 8015B   |
| C12-C13                  | ND            | 10               | mg/kg           | SW846 8015B   |
| C14-C15                  | ND            | 10               | mg/kg           | SW846 8015B   |
| C16-C17                  | ND            | 10               | mg/kg           | SW846 8015B   |
| C18-C19                  | ND            | 10               | mg/kg           | SW846 8015B   |
| C20-C23                  | ND            | 10               | mg/kg           | SW846 8015B   |
| C24-C27                  | ND            | 10               | mg/kg           | SW846 8015B   |
| C28-C31                  | ND            | 10               | mg/kg           | SW846 8015B   |
| C32-C35                  | ND            | 10               | mg/kg           | SW846 8015B   |
| C36-C39                  | ND            | 10               | mg/kg           | SW846 8015B   |
| C40+                     | ND            | 10               | mg/kg           | SW846 8015B   |
| Total Carbon Chain Range | ND            | 10               | mg/kg           | SW846 8015B   |
| <u>SURROGATE</u>         |               | <u>PERCENT</u>   | <u>RECOVERY</u> |               |
| Benzo (a)pyrene          |               | <u>RECOVERY</u>  | <u>LIMITS</u>   |               |
|                          |               | 90               | (60 - 130)      |               |

NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

000045

METHOD BLANK REPORT

GC Semivolatiles

Client Lot #....: E2F010157  
MB Lot-Sample #: E2F030000-442  
Analysis Date...: 06/04/02  
Dilution Factor: 1

Work Order #....: E2DRK1AF  
Prep Date.....: 06/03/02  
Prep Batch #: 2154442  
Analyst ID.....: 356074

Matrix.....: SOLID  
Analysis Time...: 14:47  
Instrument ID..: G03

| PARAMETER                | RESULT  | REPORTING |        |             |
|--------------------------|---------|-----------|--------|-------------|
|                          |         | LIMIT     | UNITS  | METHOD      |
| C8-C9                    | ND      | 10        | mg/kg  | SW846 8015B |
| C10-C11                  | ND      | 10        | mg/kg  | SW846 8015B |
| C12-C13                  | ND      | 10        | mg/kg  | SW846 8015B |
| C14-C15                  | ND      | 10        | mg/kg  | SW846 8015B |
| C16-C17                  | ND      | 10        | mg/kg  | SW846 8015B |
| C18-C19                  | ND      | 10        | mg/kg  | SW846 8015B |
| C20-C23                  | ND      | 10        | mg/kg  | SW846 8015B |
| C24-C27                  | ND      | 10        | mg/kg  | SW846 8015B |
| C28-C31                  | ND      | 10        | mg/kg  | SW846 8015B |
| C32-C35                  | ND      | 10        | mg/kg  | SW846 8015B |
| C36-C39                  | ND      | 10        | mg/kg  | SW846 8015B |
| C40+                     | ND      | 10        | mg/kg  | SW846 8015B |
| Total Carbon Chain Range | ND      | 10        | mg/kg  | SW846 8015B |
| SURROGATE                | PERCENT | RECOVERY  |        |             |
|                          |         | RECOVERY  | LIMITS | (60 - 130)  |
| Benzo(a)pyrene           | 88      |           |        |             |

NOTE (S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

000046

## METHOD BLANK REPORT

## TOTAL Metals

Client Lot #....: E2F010157

Matrix.....: SOLID

| <u>PARAMETER</u>  | <u>RESULT</u> | <u>REPORTING<br/>LIMIT</u> | <u>UNITS</u> | <u>METHOD</u>           | <u>PREPARATION-<br/>ANALYSIS DATE</u> | <u>WORK<br/>ORDER #</u> |
|---|---------------|----------------------------|--------------|-------------------------|---------------------------------------|-------------------------|
| <b>MB Lot-Sample #: E2F030000-211 Prep Batch #....: 2154211</b> |               |                            |              |                         |                                       |                         |
| Aluminum  | ND            | 20.0                       | mg/kg        | SW846 6010B             | 06/03-06/04/02                        | E2CPW1CD                |
|   |               | Dilution Factor: 1         |              |                         |                                       |                         |
|   |               | Analysis Time...: 11:47    |              | Analyst ID.....: 021088 | Instrument ID...: M01                 |                         |
| Arsenic   | ND            | 1.0                        | mg/kg        | SW846 6010B             | 06/03-06/04/02                        | E2CPW1AA                |
|   |               | Dilution Factor: 1         |              |                         |                                       |                         |
|   |               | Analysis Time...: 11:47    |              | Analyst ID.....: 021088 | Instrument ID...: M01                 |                         |
| Antimony  | ND            | 6.0                        | mg/kg        | SW846 6010B             | 06/03-06/04/02                        | E2CPW1AC                |
|   |               | Dilution Factor: 1         |              |                         |                                       |                         |
|   |               | Analysis Time...: 11:47    |              | Analyst ID.....: 021088 | Instrument ID...: M01                 |                         |
| Barium  | 0.18 B        | 2.0                        | mg/kg        | SW846 6010B             | 06/03-06/04/02                        | E2CPW1AD                |
|   |               | Dilution Factor: 1         |              |                         |                                       |                         |
|   |               | Analysis Time...: 11:47    |              | Analyst ID.....: 021088 | Instrument ID...: M01                 |                         |
| Cadmium   | 0.11 B        | 0.50                       | mg/kg        | SW846 6010B             | 06/03-06/04/02                        | E2CPW1AE                |
|   |               | Dilution Factor: 1         |              |                         |                                       |                         |
|   |               | Analysis Time...: 11:47    |              | Analyst ID.....: 021088 | Instrument ID...: M01                 |                         |
| Chromium  | ND            | 1.0                        | mg/kg        | SW846 6010B             | 06/03-06/04/02                        | E2CPW1AF                |
|   |               | Dilution Factor: 1         |              |                         |                                       |                         |
|   |               | Analysis Time...: 11:47    |              | Analyst ID.....: 021088 | Instrument ID...: M01                 |                         |
| Beryllium   | ND            | 0.50                       | mg/kg        | SW846 6010B             | 06/03-06/04/02                        | E2CPW1AG                |
|   |               | Dilution Factor: 1         |              |                         |                                       |                         |
|   |               | Analysis Time...: 11:47    |              | Analyst ID.....: 021088 | Instrument ID...: M01                 |                         |
| Lead  | ND            | 0.50                       | mg/kg        | SW846 6010B             | 06/03-06/04/02                        | E2CPW1AH                |
|   |               | Dilution Factor: 1         |              |                         |                                       |                         |
|   |               | Analysis Time...: 11:47    |              | Analyst ID.....: 021088 | Instrument ID...: M01                 |                         |
| Selenium  | ND            | 0.50                       | mg/kg        | SW846 6010B             | 06/03-06/04/02                        | E2CPW1AJ                |
|   |               | Dilution Factor: 1         |              |                         |                                       |                         |
|   |               | Analysis Time...: 11:47    |              | Analyst ID.....: 021088 | Instrument ID...: M01                 |                         |
| Silver  | ND            | 1.0                        | mg/kg        | SW846 6010B             | 06/03-06/04/02                        | E2CPW1AK                |
|   |               | Dilution Factor: 1         |              |                         |                                       |                         |
|   |               | Analysis Time...: 11:47    |              | Analyst ID.....: 021088 | Instrument ID...: M01                 |                         |
| Cobalt  | ND            | 5.0                        | mg/kg        | SW846 6010B             | 06/03-06/04/02                        | E2CPW1AL                |
|   |               | Dilution Factor: 1         |              |                         |                                       |                         |
|   |               | Analysis Time...: 11:47    |              | Analyst ID.....: 021088 | Instrument ID...: M01                 |                         |

(Continued on next page)

000047

## METHOD BLANK REPORT

## TOTAL Metals

Client Lot #....: E2F010157

Matrix.....: SOLID

| PARAMETER  | RESULT | REPORTING              |       |                         | METHOD | PREPARATION-         | WORK     |
|------------|--------|------------------------|-------|-------------------------|--------|----------------------|----------|
|            |        | LIMIT                  | UNITS |                         |        | ANALYSIS DATE        | ORDER #  |
| Copper     | ND     | 2.5                    | mg/kg | SW846 6010B             |        | 06/03-06/04/02       | E2CPW1AM |
|            |        | Dilution Factor: 1     |       |                         |        |                      |          |
|            |        | Analysis Time..: 11:47 |       | Analyst ID.....: 021088 |        | Instrument ID..: M01 |          |
| Molybdenum | 0.38 B | 4.0                    | mg/kg | SW846 6010B             |        | 06/03-06/04/02       | E2CPW1AN |
|            |        | Dilution Factor: 1     |       |                         |        |                      |          |
|            |        | Analysis Time..: 11:47 |       | Analyst ID.....: 021088 |        | Instrument ID..: M01 |          |
| Nickel     | ND     | 4.0                    | mg/kg | SW846 6010B             |        | 06/03-06/04/02       | E2CPW1AP |
|            |        | Dilution Factor: 1     |       |                         |        |                      |          |
|            |        | Analysis Time..: 11:47 |       | Analyst ID.....: 021088 |        | Instrument ID..: M01 |          |
| Thallium   | ND     | 1.0                    | mg/kg | SW846 6010B             |        | 06/03-06/04/02       | E2CPW1AQ |
|            |        | Dilution Factor: 1     |       |                         |        |                      |          |
|            |        | Analysis Time..: 11:47 |       | Analyst ID.....: 021088 |        | Instrument ID..: M01 |          |
| Vanadium   | ND     | 5.0                    | mg/kg | SW846 6010B             |        | 06/03-06/04/02       | E2CPW1AR |
|            |        | Dilution Factor: 1     |       |                         |        |                      |          |
|            |        | Analysis Time..: 11:47 |       | Analyst ID.....: 021088 |        | Instrument ID..: M01 |          |
| Zinc       | ND     | 2.0                    | mg/kg | SW846 6010B             |        | 06/03-06/04/02       | E2CPW1AT |
|            |        | Dilution Factor: 1     |       |                         |        |                      |          |
|            |        | Analysis Time..: 11:47 |       | Analyst ID.....: 021088 |        | Instrument ID..: M01 |          |

MB Lot-Sample #: E2F030000-215 Prep Batch #....: 2154215

|         |    |                        |       |                         |  |                      |          |
|---------|----|------------------------|-------|-------------------------|--|----------------------|----------|
| Mercury | ND | 0.10                   | mg/kg | SW846 7471A             |  | 06/03-06/07/02       | E2CP81AA |
|         |    | Dilution Factor: 1     |       |                         |  |                      |          |
|         |    | Analysis Time..: 09:21 |       | Analyst ID.....: 000023 |  | Instrument ID..: M04 |          |

NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

B Estimated result. Result is less than RL.

000048

## LABORATORY CONTROL SAMPLE EVALUATION REPORT

## GC/MS Volatiles

Client Lot #....: E2F010157      Work Order #....: E2EKT1AC      Matrix.....: SOLID  
 LCS Lot-Sample#: E2F040000-254  
 Prep Date.....: 06/03/02      Analysis Date...: 06/03/02  
 Prep Batch #....: 2155254      Analysis Time...: 17:14  
 Dilution Factor: 1      Instrument ID..: MSD  
 Analyst ID.....: 064667

| <u>PARAMETER</u>      | <u>PERCENT</u> | <u>RECOVERY</u> | <u>METHOD</u> |
|-----------------------|----------------|-----------------|---------------|
| 1,1-Dichloroethene    | 98             | (65 - 150)      | SW846 8260B   |
| Benzene               | 94             | (70 - 130)      | SW846 8260B   |
| Trichloroethene       | 96             | (70 - 135)      | SW846 8260B   |
| Toluene               | 90             | (70 - 130)      | SW846 8260B   |
| Chlorobenzene         | 86             | (70 - 130)      | SW846 8260B   |
| <u>SURROGATE</u>      | <u>PERCENT</u> | <u>RECOVERY</u> | <u>LIMITS</u> |
| Bromofluorobenzene    | 81             | (65 - 135)      |               |
| 1,2-Dichloroethane-d4 | 83             | (60 - 140)      |               |
| Toluene-d8            | 86             | (70 - 130)      |               |

NOTE (S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

000049

## LABORATORY CONTROL SAMPLE DATA REPORT

## GC/MS Volatiles

**Client Lot #....:** E2F010157    **Work Order #....:** E2EKT1AC    **Matrix.....:** SOLID  
**LCS Lot-Sample#:** E2F040000-254  
**Prep Date.....:** 06/03/02    **Analysis Date...:** 06/03/02  
**Prep Batch #....:** 2155254    **Analysis Time...:** 17:14  
**Dilution Factor:** 1    **Instrument ID...:** MSD  
**Analyst ID.....:** 064667

| <u>PARAMETER</u>   | SPIKE<br><u>AMOUNT</u> | MEASURED<br><u>AMOUNT</u> | PERCENT<br><u>UNITS</u> | RECOVERY | METHOD      |
|--------------------|------------------------|---------------------------|-------------------------|----------|-------------|
| 1,1-Dichloroethene | 50.0                   | 49.1                      | ug/kg                   | 98       | SW846 8260B |
| Benzene            | 50.0                   | 46.8                      | ug/kg                   | 94       | SW846 8260B |
| Trichloroethene    | 50.0                   | 47.8                      | ug/kg                   | 96       | SW846 8260B |
| Toluene            | 50.0                   | 45.0                      | ug/kg                   | 90       | SW846 8260B |
| Chlorobenzene      | 50.0                   | 42.8                      | ug/kg                   | 86       | SW846 8260B |

| <u>SURROGATE</u>      | PERCENT<br><u>RECOVERY</u> | RECOVERY<br><u>LIMITS</u> |
|-----------------------|----------------------------|---------------------------|
| Bromofluorobenzene    | 81                         | (65 - 135)                |
| 1,2-Dichloroethane-d4 | 83                         | (60 - 140)                |
| Toluene-d8            | 86                         | (70 - 130)                |

**NOTE (S) :**

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

000050

## LABORATORY CONTROL SAMPLE EVALUATION REPORT

## GC/MS Volatiles

Client Lot #....: E2F010157      Work Order #....: E2FFC1AC      Matrix.....: WATER  
 LCS Lot-Sample#: E2F040000-393  
 Prep Date.....: 06/03/02      Analysis Date...: 06/03/02  
 Prep Batch #....: 2155393      Analysis Time...: 20:25  
 Dilution Factor: 1      Instrument ID...: MSC  
 Analyst ID.....: 004648

| <u>PARAMETER</u>   | <u>PERCENT</u> | <u>RECOVERY</u> | <u>METHOD</u> |
|--------------------|----------------|-----------------|---------------|
| 1,1-Dichloroethene | 96             | (70 - 140)      | SW846 8260B   |
| Benzene            | 95             | (75 - 120)      | SW846 8260B   |
| Trichloroethene    | 107            | (70 - 130)      | SW846 8260B   |
| Toluene            | 99             | (75 - 125)      | SW846 8260B   |
| Chlorobenzene      | 97             | (75 - 120)      | SW846 8260B   |

| <u>SURROGATE</u>      | <u>RECOVERY</u> | <u>PERCENT</u> | <u>RECOVERY</u> |
|-----------------------|-----------------|----------------|-----------------|
| Bromofluorobenzene    | 104             | (75 - 130)     |                 |
| 1,2-Dichloroethane-d4 | 100             | (65 - 135)     |                 |
| Toluene-d8            | 106             | (80 - 130)     |                 |

NOTE (S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

000051

## LABORATORY CONTROL SAMPLE DATA REPORT

## GC/MS Volatiles

Client Lot #....: E2F010157      Work Order #....: E2FFC1AC      Matrix.....: WATER  
 LCS Lot-Sample#: E2F040000-393  
 Prep Date.....: 06/03/02      Analysis Date...: 06/03/02  
 Prep Batch #....: 2155393      Analysis Time...: 20:25  
 Dilution Factor: 1      Instrument ID...: MSC  
 Analyst ID.....: 004648

| <u>PARAMETER</u>   | SPIKE<br><u>AMOUNT</u> | MEASURED<br><u>AMOUNT</u> | UNITS | PERCENT<br>RECOVERY | METHOD      |
|--------------------|------------------------|---------------------------|-------|---------------------|-------------|
| 1,1-Dichloroethene | 10.0                   | 9.65                      | ug/L  | 96                  | SW846 8260B |
| Benzene            | 10.0                   | 9.51                      | ug/L  | 95                  | SW846 8260B |
| Trichloroethene    | 10.0                   | 10.7                      | ug/L  | 107                 | SW846 8260B |
| Toluene            | 10.0                   | 9.89                      | ug/L  | 99                  | SW846 8260B |
| Chlorobenzene      | 10.0                   | 9.66                      | ug/L  | 97                  | SW846 8260B |

| <u>SURROGATE</u>      | PERCENT<br><u>RECOVERY</u> | RECOVERY<br><u>LIMITS</u> |
|-----------------------|----------------------------|---------------------------|
| Bromofluorobenzene    | 104                        | (75 - 130)                |
| 1,2-Dichloroethane-d4 | 100                        | (65 - 135)                |
| Toluene-d8            | 106                        | (80 - 130)                |

NOTE (S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

000052

BOE-C6-0003330

## LABORATORY CONTROL SAMPLE EVALUATION REPORT

## GC/MS Volatiles

Client Lot #....: E2F010157      Work Order #....: E2GXH1AC      Matrix.....: SOLID  
 LCS Lot-Sample#: E2F050000-314  
 Prep Date.....: 06/04/02      Analysis Date...: 06/04/02  
 Prep Batch #....: 2156314      Analysis Time...: 11:35  
 Dilution Factor: 1      Instrument ID...: MSD  
 Analyst ID.....: 064667

| <u>PARAMETER</u>      | <u>PERCENT</u>  | <u>RECOVERY</u> | <u>METHOD</u>   |
|-----------------------|-----------------|-----------------|-----------------|
| 1,1-Dichloroethene    | 118             | (65 - 150)      | SW846 8260B     |
| Benzene               | 116             | (70 - 130)      | SW846 8260B     |
| Trichloroethene       | 125             | (70 - 135)      | SW846 8260B     |
| Toluene               | 110             | (70 - 130)      | SW846 8260B     |
| Chlorobenzene         | 110             | (70 - 130)      | SW846 8260B     |
| <u>SURROGATE</u>      | <u>RECOVERY</u> | <u>PERCENT</u>  | <u>RECOVERY</u> |
| Bromofluorobenzene    | 106             |                 | (65 - 135)      |
| 1,2-Dichloroethane-d4 | 118             |                 | (60 - 140)      |
| Toluene-d8            | 109             |                 | (70 - 130)      |

NOTE (S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

000053

## LABORATORY CONTROL SAMPLE DATA REPORT

## GC/MS Volatiles

Client Lot #....: E2F010157      Work Order #....: E2GXH1AC      Matrix.....: SOLID  
**LCS Lot-Sample#:** E2F050000-314  
 Prep Date.....: 06/04/02      Analysis Date...: 06/04/02  
 Prep Batch #....: 2156314      Analysis Time...: 11:35  
 Dilution Factor: 1      Instrument ID...: MSD  
 Analyst ID.....: 064667

| <u>PARAMETER</u>   | SPIKE<br><u>AMOUNT</u> | MEASURED<br><u>AMOUNT</u> | UNITS | PERCENT<br><u>RECOVERY</u> | METHOD      |
|--------------------|------------------------|---------------------------|-------|----------------------------|-------------|
| 1,1-Dichloroethene | 50.0                   | 59.1                      | ug/kg | 118                        | SW846 8260B |
| Benzene            | 50.0                   | 58.2                      | ug/kg | 116                        | SW846 8260B |
| Trichloroethene    | 50.0                   | 62.3                      | ug/kg | 125                        | SW846 8260B |
| Toluene            | 50.0                   | 55.2                      | ug/kg | 110                        | SW846 8260B |
| Chlorobenzene      | 50.0                   | 55.1                      | ug/kg | 110                        | SW846 8260B |

| <u>SURROGATE</u>      | PERCENT<br><u>RECOVERY</u> | RECOVERY<br><u>LIMITS</u> |
|-----------------------|----------------------------|---------------------------|
| Bromofluorobenzene    | 106                        | (65 - 135)                |
| 1,2-Dichloroethane-d4 | 118                        | (60 - 140)                |
| Toluene-d8            | 109                        | (70 - 130)                |

NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

000054

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC Volatiles

Client Lot #....: E2F010157      Work Order #....: E2E861AC      Matrix.....: SOLID  
LCS Lot-Sample#: E2F040000-360  
Prep Date.....: 06/03/02      Analysis Date...: 06/03/02  
Prep Batch #:....: 2155360      Analysis Time...: 12:22  
Dilution Factor: 1      Instrument ID...: G16  
Analyst ID.....: 001464

| PARAMETER                       | PERCENT  | RECOVERY   | METHOD      |
|---------------------------------|----------|------------|-------------|
|                                 | RECOVERY | LIMITS     |             |
| TPH (as Gasoline)               | 88       | (70 - 140) | SW846 8015B |
| SURROGATE                       | PERCENT  | RECOVERY   |             |
| a,a,a-Trifluorotoluene<br>(TFT) | 98       | (60 - 130) |             |

NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

000055

## LABORATORY CONTROL SAMPLE DATA REPORT

## GC Volatiles

Client Lot #....: E2F010157      Work Order #....: E2E861AC      Matrix.....: SOLID  
 LCS Lot-Sample#: E2F040000-360  
 Prep Date.....: 06/03/02      Analysis Date...: 06/03/02  
 Prep Batch #....: 2155360      Analysis Time..: 12:22  
 Dilution Factor: 1      Instrument ID.: G16  
 Analyst ID.....: 001464

| PARAMETER                       | SPIKE<br><u>AMOUNT</u> | MEASURED<br><u>AMOUNT</u> | PERCENT<br><u>UNITS</u> | PERCENT<br><u>RECOVERY</u> | METHOD      |
|---------------------------------|------------------------|---------------------------|-------------------------|----------------------------|-------------|
| TPH (as Gasoline)               | 5.00                   | 4.40                      | mg/kg                   | 88                         | SW846 8015B |
| SURROGATE                       |                        | PERCENT<br>RECOVERY       | RECOVERY                | LIMITS                     |             |
| a,a,a-Trifluorotoluene<br>(TFT) |                        | 98                        |                         | (60 - 130)                 |             |

NOTE (S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

000056

## LABORATORY CONTROL SAMPLE EVALUATION REPORT

## GC Semivolatiles

Client Lot #....: E2F010157      Work Order #....: E2DRK1AC      Matrix.....: SOLID  
LCS Lot-Sample#: E2F030000-442  
Prep Date.....: 06/03/02      Analysis Date...: 06/04/02  
Prep Batch #....: 2154442      Analysis Time...: 17:11  
Dilution Factor: 1      Instrument ID...: G02  
Analyst ID.....: 356074

| PARAMETER       | PERCENT<br>RECOVERY | RECOVERY<br>LIMITS | METHOD      |
|-----------------|---------------------|--------------------|-------------|
| TPH (as Diesel) | 85                  | (55 - 130)         | SW846 8015B |
| SURROGATE       | PERCENT<br>RECOVERY | RECOVERY<br>LIMITS |             |
| Benzo(a)pyrene  | 96                  | (60 - 130)         |             |

NOTE (S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

000057

## LABORATORY CONTROL SAMPLE DATA REPORT

## GC Semivolatiles

**Client Lot #....:** E2F010157      **Work Order #....:** E2DRK1AC      **Matrix.....:** SOLID  
**LCS Lot-Sample#:** E2F030000-442  
**Prep Date.....:** 06/03/02      **Analysis Date...:** 06/04/02  
**Prep Batch #....:** 2154442      **Analysis Time..:** 17:11  
**Dilution Factor:** 1      **Instrument ID..:** G02  
**Analyst ID.....:** 356074

| <u>PARAMETER</u>       | <u>SPIKE</u>  | <u>MEASURED</u> | <u>PERCENT</u>  | <u>RECOVERY</u> | <u>METHOD</u>      |
|------------------------|---------------|-----------------|-----------------|-----------------|--------------------|
|                        | <u>AMOUNT</u> | <u>AMOUNT</u>   | <u>UNITS</u>    |                 |                    |
|                        |               |                 | <u>mg/kg</u>    | <u>85</u>       | <u>SW846 8015B</u> |
| <b>TPH (as Diesel)</b> | <b>250</b>    | <b>214</b>      |                 |                 |                    |
| <b>SURROGATE</b>       |               | <u>PERCENT</u>  | <u>RECOVERY</u> |                 |                    |
| Benzo(a)pyrene         |               | <u>RECOVERY</u> | <u>LIMITS</u>   |                 |                    |
|                        |               | 96              | (60 - 130)      |                 |                    |

NOTE (S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

000058

## LABORATORY CONTROL SAMPLE EVALUATION REPORT

## GC Semivolatiles

**Client Lot #....:** E2F010157      **Work Order #....:** E2DRK1AG      **Matrix.....:** SOLID  
**LCS Lot-Sample#:** E2F030000-442  
**Prep Date.....:** 06/03/02      **Analysis Date...:** 06/04/02  
**Prep Batch #....:** 2154442      **Analysis Time...:** 15:27  
**Dilution Factor:** 1      **Instrument ID...:** G03  
**Analyst ID.....:** 356074

| <u>PARAMETER</u>       | <u>PERCENT</u><br><u>RECOVERY</u> | <u>RECOVERY</u><br><u>LIMITS</u>  | <u>METHOD</u>                    |
|------------------------|-----------------------------------|-----------------------------------|----------------------------------|
| <b>TPH (as Diesel)</b> | <b>89</b>                         | (55 - 130)                        | <b>SW846 8015B</b>               |
| <b>SURROGATE</b>       |                                   | <u>PERCENT</u><br><u>RECOVERY</u> | <u>RECOVERY</u><br><u>LIMITS</u> |
| Benzo(a)pyrene         |                                   | 95                                | (60 - 130)                       |

**NOTE (S) :**

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

000059

BOE-C6-0003337

## LABORATORY CONTROL SAMPLE DATA REPORT

## GC Semivolatiles

**Client Lot #....:** E2F010157      **Work Order #....:** E2DRK1AG      **Matrix.....:** SOLID  
**LCS Lot-Sample#:** E2F030000-442  
**Prep Date.....:** 06/03/02      **Analysis Date...:** 06/04/02  
**Prep Batch #....:** 2154442      **Analysis Time...:** 15:27  
**Dilution Factor:** 1      **Instrument ID...:** G03  
**Analyst ID.....:** 356074

| <u>PARAMETER</u>       | <u>SPIKE<br/>AMOUNT</u> | <u>MEASURED<br/>AMOUNT</u>  | <u>UNITS</u>               | <u>PERCENT<br/>RECOVERY</u> | <u>METHOD</u>      |
|------------------------|-------------------------|-----------------------------|----------------------------|-----------------------------|--------------------|
| <b>TPH (as Diesel)</b> | <b>250</b>              | <b>221</b>                  | <b>mg/kg</b>               | <b>89</b>                   | <b>SW846 8015B</b> |
| <b>SURROGATE</b>       |                         | <u>PERCENT<br/>RECOVERY</u> | <u>RECOVERY<br/>LIMITS</u> |                             |                    |
| Benzo(a)pyrene         |                         | 95                          | (60 - 130)                 |                             |                    |

NOTE (S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

000060

## LABORATORY CONTROL SAMPLE EVALUATION REPORT

## TOTAL Metals

Client Lot #....: E2F010157

Matrix.....: SOLID

| <u>PARAMETER</u> | <u>PERCENT<br/>RECOVERY</u> | <u>RECOVERY<br/>LIMITS</u> | <u>METHOD</u>           | <u>PREPARATION-<br/>ANALYSIS DATE</u> | <u>WORK ORDER #</u>   |
|------------------|-----------------------------|----------------------------|-------------------------|---------------------------------------|-----------------------|
| LCS Lot-Sample#: | E2F030000-211               | Prep Batch #....: 2154211  |                         |                                       |                       |
| Arsenic          | 99                          | (75 - 115)                 | SW846 6010B             | 06/03-06/04/02                        | E2CPW1AU              |
|                  |                             | Dilution Factor: 1         |                         |                                       |                       |
|                  |                             | Analysis Time...: 11:53    | Analyst ID.....: 021088 |                                       | Instrument ID...: M01 |
| Aluminum         | 95                          | (70 - 115)                 | SW846 6010B             | 06/03-06/04/02                        | E2CPW1CE              |
|                  |                             | Dilution Factor: 1         |                         |                                       |                       |
|                  |                             | Analysis Time...: 11:53    | Analyst ID.....: 021088 |                                       | Instrument ID...: M01 |
| Antimony         | 99                          | (75 - 115)                 | SW846 6010B             | 06/03-06/04/02                        | E2CPW1AV              |
|                  |                             | Dilution Factor: 1         |                         |                                       |                       |
|                  |                             | Analysis Time...: 11:53    | Analyst ID.....: 021088 |                                       | Instrument ID...: M01 |
| Barium           | 99                          | (80 - 120)                 | SW846 6010B             | 06/03-06/04/02                        | E2CPW1AW              |
|                  |                             | Dilution Factor: 1         |                         |                                       |                       |
|                  |                             | Analysis Time...: 11:53    | Analyst ID.....: 021088 |                                       | Instrument ID...: M01 |
| Cadmium          | 99                          | (80 - 120)                 | SW846 6010B             | 06/03-06/04/02                        | E2CPW1AX              |
|                  |                             | Dilution Factor: 1         |                         |                                       |                       |
|                  |                             | Analysis Time...: 11:53    | Analyst ID.....: 021088 |                                       | Instrument ID...: M01 |
| Chromium         | 102                         | (85 - 120)                 | SW846 6010B             | 06/03-06/04/02                        | E2CPW1AO              |
|                  |                             | Dilution Factor: 1         |                         |                                       |                       |
|                  |                             | Analysis Time...: 11:53    | Analyst ID.....: 021088 |                                       | Instrument ID...: M01 |
| Beryllium        | 104                         | (80 - 120)                 | SW846 6010B             | 06/03-06/04/02                        | E2CPW1A1              |
|                  |                             | Dilution Factor: 1         |                         |                                       |                       |
|                  |                             | Analysis Time...: 11:53    | Analyst ID.....: 021088 |                                       | Instrument ID...: M01 |
| Lead             | 99                          | (80 - 120)                 | SW846 6010B             | 06/03-06/04/02                        | E2CPW1A2              |
|                  |                             | Dilution Factor: 1         |                         |                                       |                       |
|                  |                             | Analysis Time...: 11:53    | Analyst ID.....: 021088 |                                       | Instrument ID...: M01 |
| Selenium         | 90                          | (70 - 115)                 | SW846 6010B             | 06/03-06/04/02                        | E2CPW1A3              |
|                  |                             | Dilution Factor: 1         |                         |                                       |                       |
|                  |                             | Analysis Time...: 11:53    | Analyst ID.....: 021088 |                                       | Instrument ID...: M01 |
| Silver           | 100                         | (80 - 120)                 | SW846 6010B             | 06/03-06/04/02                        | E2CPW1A4              |
|                  |                             | Dilution Factor: 1         |                         |                                       |                       |
|                  |                             | Analysis Time...: 11:53    | Analyst ID.....: 021088 |                                       | Instrument ID...: M01 |

(Continued on next page)

**000061**

## LABORATORY CONTROL SAMPLE EVALUATION REPORT

## TOTAL Metals

Client Lot #....: E2F010157

Matrix.....: SOLID

| <u>PARAMETER</u> | <u>PERCENT RECOVERY</u> | <u>RECOVERY LIMITS</u>  | <u>METHOD</u> | <u>PREPARATION-</u>     | <u>ANALYSIS DATE</u> | <u>WORK ORDER #</u>   |
|------------------|-------------------------|-------------------------|---------------|-------------------------|----------------------|-----------------------|
| Cobalt           | 100                     | (80 - 120)              | SW846 6010B   |                         | 06/03-06/04/02       | E2CPW1A5              |
|                  |                         | Dilution Factor: 1      |               |                         |                      |                       |
|                  |                         | Analysis Time...: 11:53 |               | Analyst ID.....: 021088 |                      | Instrument ID...: M01 |
| Copper           | 101                     | (80 - 120)              | SW846 6010B   |                         | 06/03-06/04/02       | E2CPW1A6              |
|                  |                         | Dilution Factor: 1      |               |                         |                      |                       |
|                  |                         | Analysis Time...: 11:53 |               | Analyst ID.....: 021088 |                      | Instrument ID...: M01 |
| Molybdenum       | 101                     | (80 - 120)              | SW846 6010B   |                         | 06/03-06/04/02       | E2CPW1A7              |
|                  |                         | Dilution Factor: 1      |               |                         |                      |                       |
|                  |                         | Analysis Time...: 11:53 |               | Analyst ID.....: 021088 |                      | Instrument ID...: M01 |
| Nickel           | 99                      | (80 - 120)              | SW846 6010B   |                         | 06/03-06/04/02       | E2CPW1A8              |
|                  |                         | Dilution Factor: 1      |               |                         |                      |                       |
|                  |                         | Analysis Time...: 11:53 |               | Analyst ID.....: 021088 |                      | Instrument ID...: M01 |
| Thallium         | 98                      | (75 - 125)              | SW846 6010B   |                         | 06/03-06/04/02       | E2CPW1A9              |
|                  |                         | Dilution Factor: 1      |               |                         |                      |                       |
|                  |                         | Analysis Time...: 11:53 |               | Analyst ID.....: 021088 |                      | Instrument ID...: M01 |
| Vanadium         | 101                     | (80 - 120)              | SW846 6010B   |                         | 06/03-06/04/02       | E2CPW1CA              |
|                  |                         | Dilution Factor: 1      |               |                         |                      |                       |
|                  |                         | Analysis Time...: 11:53 |               | Analyst ID.....: 021088 |                      | Instrument ID...: M01 |
| Zinc             | 102                     | (80 - 120)              | SW846 6010B   |                         | 06/03-06/04/02       | E2CPW1CC              |
|                  |                         | Dilution Factor: 1      |               |                         |                      |                       |
|                  |                         | Analysis Time...: 11:53 |               | Analyst ID.....: 021088 |                      | Instrument ID...: M01 |
| LCS Lot-Sample#: | E2F030000-215           | Prep Batch #...:        | 2154215       |                         |                      |                       |
| Mercury          | 106                     | (85 - 115)              | SW846 7471A   |                         | 06/03-06/07/02       | E2CP81AC              |
|                  |                         | Dilution Factor: 1      |               |                         |                      |                       |
|                  |                         | Analysis Time...: 09:22 |               | Analyst ID.....: 000023 |                      | Instrument ID...: M04 |

NOTE (S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

000062

## LABORATORY CONTROL SAMPLE DATA REPORT

## TOTAL Metals

Client Lot #....: E2F010157

Matrix.....: SOLID

| PARAMETER  | SPIKE<br>AMOUNT | MEASURED<br>AMOUNT | UNITS             | PERCNT<br>RECVRY | PREPARATION-<br>ANALYSIS DATE | WORK<br>ORDER #         |
|--|-----------------|--------------------|-------------------|------------------|-------------------------------|-------------------------|
| <b>LCS Lot-Sample#:</b> E2F030000-211 <b>Prep Batch #....:</b> 2154211 |                 |                    |                   |                  |                               |                         |
| Arsenic  | 200             | 197                | mg/kg             | 99               | SW846 6010B                   | 06/03-06/04/02 E2CPW1AU |
|  |                 |                    | Dilution Factor:  | 1                |                               |                         |
|  |                 |                    | Analysis Time...: | 11:53            | Analyst ID.....: 021088       | Instrument ID...: M01   |
| Aluminum   | 200             | 190                | mg/kg             | 95               | SW846 6010B                   | 06/03-06/04/02 E2CPW1CE |
|  |                 |                    | Dilution Factor:  | 1                |                               |                         |
|  |                 |                    | Analysis Time...: | 11:53            | Analyst ID.....: 021088       | Instrument ID...: M01   |
| Antimony   | 50.0            | 49.6               | mg/kg             | 99               | SW846 6010B                   | 06/03-06/04/02 E2CPW1AV |
|  |                 |                    | Dilution Factor:  | 1                |                               |                         |
|  |                 |                    | Analysis Time...: | 11:53            | Analyst ID.....: 021088       | Instrument ID...: M01   |
| Barium   | 200             | 199                | mg/kg             | 99               | SW846 6010B                   | 06/03-06/04/02 E2CPW1AW |
|  |                 |                    | Dilution Factor:  | 1                |                               |                         |
|  |                 |                    | Analysis Time...: | 11:53            | Analyst ID.....: 021088       | Instrument ID...: M01   |
| Cadmium  | 5.00            | 4.93               | mg/kg             | 99               | SW846 6010B                   | 06/03-06/04/02 E2CPW1AX |
|  |                 |                    | Dilution Factor:  | 1                |                               |                         |
|  |                 |                    | Analysis Time...: | 11:53            | Analyst ID.....: 021088       | Instrument ID...: M01   |
| Chromium   | 20.0            | 20.3               | mg/kg             | 102              | SW846 6010B                   | 06/03-06/04/02 E2CPW1A0 |
|  |                 |                    | Dilution Factor:  | 1                |                               |                         |
|  |                 |                    | Analysis Time...: | 11:53            | Analyst ID.....: 021088       | Instrument ID...: M01   |
| Beryllium  | 5.00            | 5.18               | mg/kg             | 104              | SW846 6010B                   | 06/03-06/04/02 E2CPW1A1 |
|  |                 |                    | Dilution Factor:  | 1                |                               |                         |
|  |                 |                    | Analysis Time...: | 11:53            | Analyst ID.....: 021088       | Instrument ID...: M01   |
| Lead   | 50.0            | 49.4               | mg/kg             | 99               | SW846 6010B                   | 06/03-06/04/02 E2CPW1A2 |
|  |                 |                    | Dilution Factor:  | 1                |                               |                         |
|  |                 |                    | Analysis Time...: | 11:53            | Analyst ID.....: 021088       | Instrument ID...: M01   |
| Selenium   | 200             | 180                | mg/kg             | 90               | SW846 6010B                   | 06/03-06/04/02 E2CPW1A3 |
|  |                 |                    | Dilution Factor:  | 1                |                               |                         |
|  |                 |                    | Analysis Time...: | 11:53            | Analyst ID.....: 021088       | Instrument ID...: M01   |
| Silver   | 5.00            | 4.99               | mg/kg             | 100              | SW846 6010B                   | 06/03-06/04/02 E2CPW1A4 |
|  |                 |                    | Dilution Factor:  | 1                |                               |                         |
|  |                 |                    | Analysis Time...: | 11:53            | Analyst ID.....: 021088       | Instrument ID...: M01   |

(Continued on next page)

000063

## LABORATORY CONTROL SAMPLE DATA REPORT

## TOTAL Metals

Client Lot #....: E2F010157

Matrix.....: SOLID

| <u>PARAMETER</u>  | <u>SPIKE AMOUNT</u> | <u>MEASURED AMOUNT</u> | <u>UNITS</u>            | <u>PERCNT RECVRY</u> | <u>METHOD</u>           | <u>PREPARATION- ANALYSIS DATE</u> | <u>WORK ORDER #</u> |
|---|---------------------|------------------------|-------------------------|----------------------|-------------------------|-----------------------------------|---------------------|
| Cobalt  | 50.0                | 49.8                   | mg/kg                   | 100                  | SW846 6010B             | 06/03-06/04/02                    | E2CPW1A5            |
|   |                     |                        | Dilution Factor: 1      |                      |                         |                                   |                     |
|   |                     |                        | Analysis Time...: 11:53 |                      | Analyst ID.....: 021088 | Instrument ID...: M01             |                     |
| Copper  | 25.0                | 25.1                   | mg/kg                   | 101                  | SW846 6010B             | 06/03-06/04/02                    | E2CPW1A6            |
|   |                     |                        | Dilution Factor: 1      |                      |                         |                                   |                     |
|   |                     |                        | Analysis Time...: 11:53 |                      | Analyst ID.....: 021088 | Instrument ID...: M01             |                     |
| Molybdenum  | 100                 | 101                    | mg/kg                   | 101                  | SW846 6010B             | 06/03-06/04/02                    | E2CPW1A7            |
|   |                     |                        | Dilution Factor: 1      |                      |                         |                                   |                     |
|   |                     |                        | Analysis Time...: 11:53 |                      | Analyst ID.....: 021088 | Instrument ID...: M01             |                     |
| Nickel  | 50.0                | 49.5                   | mg/kg                   | 99                   | SW846 6010B             | 06/03-06/04/02                    | E2CPW1A8            |
|   |                     |                        | Dilution Factor: 1      |                      |                         |                                   |                     |
|   |                     |                        | Analysis Time...: 11:53 |                      | Analyst ID.....: 021088 | Instrument ID...: M01             |                     |
| Thallium  | 200                 | 196                    | mg/kg                   | 98                   | SW846 6010B             | 06/03-06/04/02                    | E2CPW1A9            |
|   |                     |                        | Dilution Factor: 1      |                      |                         |                                   |                     |
|   |                     |                        | Analysis Time...: 11:53 |                      | Analyst ID.....: 021088 | Instrument ID...: M01             |                     |
| Vanadium  | 50.0                | 50.7                   | mg/kg                   | 101                  | SW846 6010B             | 06/03-06/04/02                    | E2CPW1CA            |
|   |                     |                        | Dilution Factor: 1      |                      |                         |                                   |                     |
|   |                     |                        | Analysis Time...: 11:53 |                      | Analyst ID.....: 021088 | Instrument ID...: M01             |                     |
| Zinc  | 50.0                | 50.9                   | mg/kg                   | 102                  | SW846 6010B             | 06/03-06/04/02                    | E2CPW1CC            |
|   |                     |                        | Dilution Factor: 1      |                      |                         |                                   |                     |
|   |                     |                        | Analysis Time...: 11:53 |                      | Analyst ID.....: 021088 | Instrument ID...: M01             |                     |
| LCS Lot-Sample#: E2F030000-215 Prep Batch #...: 2154215 |                     |                        |                         |                      |                         |                                   |                     |
| Mercury   | 0.833               | 0.884                  | mg/kg                   | 106                  | SW846 7471A             | 06/03-06/07/02                    | E2CP81AC            |
|   |                     |                        | Dilution Factor: 1      |                      |                         |                                   |                     |
|   |                     |                        | Analysis Time...: 09:22 |                      | Analyst ID.....: 000023 | Instrument ID...: M04             |                     |

NOTE (S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

000064

## MATRIX SPIKE SAMPLE EVALUATION REPORT

## GC/MS Volatiles

Client Lot #....: E2F010157 Work Order #....: E12T61AK-MS Matrix.....: SOLID  
MS Lot-Sample #: G2E240279-004 E12T61AL-MSD  
Date Sampled...: 05/22/02 15:05 Date Received...: 05/24/02 09:18 MS Run #: 2155104  
Prep Date.....: 06/03/02 Analysis Date...: 06/03/02  
Prep Batch #....: 2155254 Analysis Time...: 19:15  
Dilution Factor: 1 Analyst ID.....: 064667 Instrument ID...: MSD

| <u>PARAMETER</u>             | <u>PERCENT</u>  | <u>RECOVERY</u> | <u>RPD</u> | <u>RPD</u>      | <u>METHOD</u> |
|------------------------------|-----------------|-----------------|------------|-----------------|---------------|
|                              | <u>RECOVERY</u> | <u>LIMITS</u>   |            | <u>LIMITS</u>   |               |
| <b>1,1-Dichloroethene</b>    | 110             | (65 - 150)      |            |                 | SW846 8260B   |
|                              | 113             | (65 - 150)      | 2.3        | (0-30)          | SW846 8260B   |
| <b>Benzene</b>               | 108             | (70 - 130)      |            |                 | SW846 8260B   |
|                              | 112             | (70 - 130)      | 3.7        | (0-30)          | SW846 8260B   |
| <b>Trichloroethene</b>       | 148 a, MSC      | (70 - 135)      |            |                 | SW846 8260B   |
|                              | 153 a, MSC      | (70 - 135)      | 2.7        | (0-30)          | SW846 8260B   |
| <b>Toluene</b>               | 107             | (70 - 130)      |            |                 | SW846 8260B   |
|                              | 107             | (70 - 130)      | 0.56       | (0-30)          | SW846 8260B   |
| <b>Chlorobenzene</b>         | 107             | (70 - 130)      |            |                 | SW846 8260B   |
|                              | 106             | (70 - 130)      | 0.22       | (0-30)          | SW846 8260B   |
| <u>SURROGATE</u>             | <u>PERCENT</u>  | <u>RECOVERY</u> |            | <u>RECOVERY</u> |               |
|                              |                 | <u>RECOVERY</u> |            | <u>LIMITS</u>   |               |
| <b>Bromofluorobenzene</b>    |                 | 106             |            | (65 - 135)      |               |
|                              |                 | 101             |            | (65 - 135)      |               |
| <b>1,2-Dichloroethane-d4</b> |                 | 114             |            | (60 - 140)      |               |
|                              |                 | 112             |            | (60 - 140)      |               |
| <b>Toluene-d8</b>            |                 | 111             |            | (70 - 130)      |               |
|                              |                 | 108             |            | (70 - 130)      |               |

**NOTE (S) :**

Calculations are performed before rounding to avoid round-off errors in calculated results.

**Bold print** denotes control parameters

Results and reporting limits have been adjusted for dry weight.

a Spiked analyte recovery is outside stated control limits.

MSC The percent recovery of this analyte in the associated laboratory control sample is within control limits.

000065

MATRIX SPIKE SAMPLE DATA REPORT

GC/MS Volatiles

Client Lot #....: E2F010157      Work Order #....: E12T61AK-MS      Matrix.....: SOLID  
 MS Lot-Sample #: G2E240279-004      E12T61AL-MSD  
 Date Sampled...: 05/22/02 15:05 Date Received...: 05/24/02 09:18 MS Run #.....: 2155104  
 Prep Date.....: 06/03/02 Analysis Date...: 06/03/02  
 Prep Batch #....: 2155254 Analysis Time...: 19:15  
 Dilution Factor: 1 Analyst ID.....: 064667      Instrument ID...: MSD

| PARAMETER          | SAMPLE             | SPIKE | MEASRD | PERCNT |        |      |             |
|--------------------|--------------------|-------|--------|--------|--------|------|-------------|
|                    | AMOUNT             | AMT   | AMOUNT | UNITS  | RECVRY | RPD  | METHOD      |
| 1,1-Dichloroethene | ND                 | 50.5  | 55.6   | ug/kg  | 110    |      | SW846 8260B |
|                    | ND                 | 50.5  | 57.0   | ug/kg  | 113    | 2.3  | SW846 8260B |
| Benzene            | ND                 | 50.5  | 54.5   | ug/kg  | 108    |      | SW846 8260B |
|                    | ND                 | 50.5  | 56.6   | ug/kg  | 112    | 3.7  | SW846 8260B |
| Trichloroethene    | ND                 | 50.5  | 74.9   | ug/kg  | 148    |      | SW846 8260B |
|                    | Qualifiers: a, MSC |       |        |        |        |      |             |
|                    | ND                 | 50.5  | 77.0   | ug/kg  | 153    | 2.7  | SW846 8260B |
|                    | Qualifiers: a, MSC |       |        |        |        |      |             |
| Toluene            | ND                 | 50.5  | 53.8   | ug/kg  | 107    |      | SW846 8260B |
|                    | ND                 | 50.5  | 54.1   | ug/kg  | 107    | 0.56 | SW846 8260B |
| Chlorobenzene      | ND                 | 50.5  | 53.9   | ug/kg  | 107    |      | SW846 8260B |
|                    | ND                 | 50.5  | 53.7   | ug/kg  | 106    | 0.22 | SW846 8260B |

| SURROGATE             | PERCENT  |            | RECOVERY |
|-----------------------|----------|------------|----------|
|                       | RECOVERY | LIMITS     |          |
| Bromofluorobenzene    | 106      | (65 - 135) |          |
|                       | 101      | (65 - 135) |          |
| 1,2-Dichloroethane-d4 | 114      | (60 - 140) |          |
|                       | 112      | (60 - 140) |          |
| Toluene-d8            | 111      | (70 - 130) |          |
|                       | 108      | (70 - 130) |          |

**NOTE (S) :**

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

Results and reporting limits have been adjusted for dry weight.

a Spiked analyte recovery is outside stated control limits.

MSC The percent recovery of this analyte in the associated laboratory control sample is within control limits.

000066

## MATRIX SPIKE SAMPLE EVALUATION REPORT

## GC/MS Volatiles

Client Lot #....: E2F010157      Work Order #....: E18N31AJ-MS      Matrix.....: WATER  
**MS Lot-Sample #:** G2E300347-003      E18N31AK-MSD  
 Date Sampled....: 05/30/02 09:22 Date Received...: 05/30/02 15:20 MS Run #.....: 2155243  
 Prep Date.....: 06/04/02 Analysis Date...: 06/04/02  
 Prep Batch #....: 2155393 Analysis Time...: 04:17  
 Dilution Factor: 1 Analyst ID.....: 004648      Instrument ID...: MSC

| <u>PARAMETER</u>      | <u>PERCENT</u>  | <u>RECOVERY</u> | <u>RPD</u> | <u>RECOVERY</u> | <u>METHOD</u> |
|-----------------------|-----------------|-----------------|------------|-----------------|---------------|
|                       | <u>RECOVERY</u> | <u>LIMITS</u>   | <u>RPD</u> | <u>LIMITS</u>   |               |
| J,1-Dichloroethene    | 94              | (70 - 140)      |            |                 | SW846 8260B   |
|                       | 96              | (70 - 140)      | 2.4        | (0-25)          | SW846 8260B   |
| Benzene               | 98              | (75 - 120)      |            |                 | SW846 8260B   |
|                       | 98              | (75 - 120)      | 0.0        | (0-25)          | SW846 8260B   |
| Trichloroethene       | 105             | (70 - 130)      |            |                 | SW846 8260B   |
|                       | 106             | (70 - 130)      | 1.2        | (0-25)          | SW846 8260B   |
| Toluene               | 100             | (75 - 125)      |            |                 | SW846 8260B   |
|                       | 102             | (75 - 125)      | 1.2        | (0-25)          | SW846 8260B   |
| Chlorobenzene         | 100             | (75 - 120)      |            |                 | SW846 8260B   |
|                       | 99              | (75 - 120)      | 0.80       | (0-25)          | SW846 8260B   |
| <u>SURROGATE</u>      |                 |                 |            |                 |               |
| Bromofluorobenzene    |                 | <u>PERCENT</u>  |            | <u>RECOVERY</u> |               |
|                       |                 | <u>RECOVERY</u> |            | <u>LIMITS</u>   |               |
| 1,2-Dichloroethane-d4 |                 | 107             |            | (75 - 130)      |               |
|                       |                 | 108             |            | (75 - 130)      |               |
| Toluene-d8            |                 | 107             |            | (65 - 135)      |               |
|                       |                 | 107             |            | (65 - 135)      |               |
|                       |                 | 104             |            | (80 - 130)      |               |
|                       |                 | 106             |            | (80 - 130)      |               |

NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

000067

## MATRIX SPIKE SAMPLE DATA REPORT

## GC/MS Volatiles

Client Lot #....: E2F010157      Work Order #....: E18N31AJ-MS      Matrix.....: WATER  
 MS Lot-Sample #: G2E300347-003      E18N31AK-MSD  
 Date Sampled....: 05/30/02 09:22 Date Received...: 05/30/02 15:20 MS Run #.....: 2155243  
 Prep Date.....: 06/04/02 Analysis Date...: 06/04/02  
 Prep Batch #....: 2155393 Analysis Time...: 04:17  
 Dilution Factor: 1 Analyst ID.....: 004648      Instrument ID...: MSC

| PARAMETER                 | SAMPLE | SPIKE | MEASRD | UNITS | PERCNT |      |             |
|---------------------------|--------|-------|--------|-------|--------|------|-------------|
|                           | AMOUNT | AMT   | AMOUNT |       | RECVRY | RPD  | METHOD      |
| <b>1,1-Dichloroethene</b> | ND     | 10.0  | 9.41   | ug/L  | 94     |      | SW846 8260B |
|                           | ND     | 10.0  | 9.64   | ug/L  | 96     | 2.4  | SW846 8260B |
| <b>Benzene</b>            | ND     | 10.0  | 9.82   | ug/L  | 98     |      | SW846 8260B |
|                           | ND     | 10.0  | 9.82   | ug/L  | 98     | 0.0  | SW846 8260B |
| <b>Trichloroethene</b>    | ND     | 10.0  | 10.5   | ug/L  | 105    |      | SW846 8260B |
|                           | ND     | 10.0  | 10.6   | ug/L  | 106    | 1.2  | SW846 8260B |
| <b>Toluene</b>            | ND     | 10.0  | 10.0   | ug/L  | 100    |      | SW846 8260B |
|                           | ND     | 10.0  | 10.2   | ug/L  | 102    | 1.2  | SW846 8260B |
| <b>Chlorobenzene</b>      | ND     | 10.0  | 9.95   | ug/L  | 100    |      | SW846 8260B |
|                           | ND     | 10.0  | 9.87   | ug/L  | 99     | 0.80 | SW846 8260B |

| SURROGATE             | PERCENT  | RECOVERY | LIMITS     |
|-----------------------|----------|----------|------------|
|                       | RECOVERY |          |            |
| Bromofluorobenzene    | 107      |          | (75 - 130) |
|                       | 108      |          | (75 - 130) |
| 1,2-Dichloroethane-d4 | 107      |          | (65 - 135) |
|                       | 107      |          | (65 - 135) |
| Toluene-d8            | 104      |          | (80 - 130) |
|                       | 106      |          | (80 - 130) |

**NOTE (S) :**

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

000068

## MATRIX SPIKE SAMPLE EVALUATION REPORT

## GC/MS Volatiles

Client Lot #....: E2F010157      Work Order #....: E2AD81CT-MS      Matrix.....: SOLID  
 MS Lot-Sample #: G2E310257-001      E2AD81CU-MSD  
 Date Sampled....: 05/29/02 07:45 Date Received...: 05/31/02 09:10 MS Run #.....: 2156145  
 Prep Date.....: 06/04/02 Analysis Date...: 06/04/02  
 Prep Batch #....: 2156314 Analysis Time...: 14:59  
 Dilution Factor: 1 Analyst ID.....: 064667      Instrument ID...: MSD

| <u>PARAMETER</u>             | <u>PERCENT RECOVERY</u> | <u>RECOVERY LIMITS</u> | <u>RPD</u> | <u>RPD LIMITS</u> | <u>METHOD</u> |
|------------------------------|-------------------------|------------------------|------------|-------------------|---------------|
| <b>1,1-Dichloroethene</b>    | 128                     | (65 - 150)             | 3.8        | (0-30)            | SW846 8260B   |
|                              | 124                     | (65 - 150)             |            |                   | SW846 8260B   |
| <b>Benzene</b>               | 128                     | (70 - 130)             | 3.7        | (0-30)            | SW846 8260B   |
|                              | 123                     | (70 - 130)             |            |                   | SW846 8260B   |
| <b>Trichloroethene</b>       | 148 a, MSC              | (70 - 135)             | 6.1        | (0-30)            | SW846 8260B   |
|                              | 139 a, MSC              | (70 - 135)             |            |                   | SW846 8260B   |
| <b>Toluene</b>               | 118                     | (70 - 130)             | 5.4        | (0-30)            | SW846 8260B   |
|                              | 112                     | (70 - 130)             |            |                   | SW846 8260B   |
| <b>Chlorobenzene</b>         | 116                     | (70 - 130)             | 4.0        | (0-30)            | SW846 8260B   |
|                              | 112                     | (70 - 130)             |            |                   | SW846 8260B   |
| <u>SURROGATE</u>             | <u>PERCENT RECOVERY</u> | <u>RECOVERY LIMITS</u> |            |                   |               |
| <b>Bromofluorobenzene</b>    | 103                     | (65 - 135)             |            |                   |               |
|                              | 99                      | (65 - 135)             |            |                   |               |
| <b>1,2-Dichloroethane-d4</b> | 130                     | (60 - 140)             |            |                   |               |
|                              | 123                     | (60 - 140)             |            |                   |               |
| <b>Toluene-d8</b>            | 112                     | (70 - 130)             |            |                   |               |
|                              | 102                     | (70 - 130)             |            |                   |               |

NOTE (S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

Results and reporting limits have been adjusted for dry weight.

a Spiked analyte recovery is outside stated control limits.

MSC The percent recovery of this analyte in the associated laboratory control sample is within control limits.

000069

## MATRIX SPIKE SAMPLE DATA REPORT

## GC/MS Volatiles

Client Lot #....: E2F010157      Work Order #....: E2AD81CT-MS      Matrix.....: SOLID  
 MS Lot-Sample #: G2E310257-001      E2AD81CU-MSD  
 Date Sampled....: 05/29/02 07:45 Date Received...: 05/31/02 09:10 MS Run #.....: 2156145  
 Prep Date.....: 06/04/02 Analysis Date...: 06/04/02  
 Prep Batch #....: 2156314 Analysis Time...: 14:59  
 Dilution Factor: 1 Analyst ID.....: 064667      Instrument ID...: MSD

| PARAMETER          | SAMPLE             | SPIKE | MEASRD | UNITS | PERCNT |     |             |
|--------------------|--------------------|-------|--------|-------|--------|-----|-------------|
|                    | AMOUNT             | AMT   | AMOUNT |       | RECVRY | RPD | METHOD      |
| 1,1-Dichloroethene | ND                 | 52.0  | 66.7   | ug/kg | 128    |     | SW846 8260B |
|                    | ND                 | 52.0  | 64.2   | ug/kg | 124    | 3.8 | SW846 8260B |
| Benzene            | ND                 | 52.0  | 66.4   | ug/kg | 128    |     | SW846 8260B |
|                    | ND                 | 52.0  | 64.0   | ug/kg | 123    | 3.7 | SW846 8260B |
| Trichloroethene    | ND                 | 52.0  | 76.9   | ug/kg | 148    |     | SW846 8260B |
|                    | Qualifiers: a, MSC |       |        |       |        |     |             |
| Toluene            | ND                 | 52.0  | 72.4   | ug/kg | 139    | 6.1 | SW846 8260B |
|                    | Qualifiers: a, MSC |       |        |       |        |     |             |
| Chlorobenzene      | ND                 | 52.0  | 61.3   | ug/kg | 118    |     | SW846 8260B |
|                    | ND                 | 52.0  | 58.0   | ug/kg | 112    | 5.4 | SW846 8260B |
|                    | ND                 | 52.0  | 60.5   | ug/kg | 116    |     | SW846 8260B |
|                    | ND                 | 52.0  | 58.2   | ug/kg | 112    | 4.0 | SW846 8260B |

| SURROGATE             | PERCENT  | RECOVERY | LIMITS     |
|-----------------------|----------|----------|------------|
|                       | RECOVERY |          |            |
| Bromofluorobenzene    | 103      |          | (65 - 135) |
|                       | 99       |          | (65 - 135) |
| 1,2-Dichloroethane-d4 | 130      |          | (60 - 140) |
|                       | 123      |          | (60 - 140) |
| Toluene-d8            | 112      |          | (70 - 130) |
|                       | 102      |          | (70 - 130) |

**NOTE (S) :**

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

Results and reporting limits have been adjusted for dry weight.

a Spiked analyte recovery is outside stated control limits.

MSC The percent recovery of this analyte in the associated laboratory control sample is within control limits.

000070

## MATRIX SPIKE SAMPLE EVALUATION REPORT

## GC Volatiles

| <u>PARAMETER</u>                | <u>PERCENT<br/>RECOVERY</u> | <u>RECOVERY<br/>LIMITS</u>  | <u>RPD</u> | <u>RPD<br/>LIMITS</u>      | <u>METHOD</u> |
|---------------------------------|-----------------------------|-----------------------------|------------|----------------------------|---------------|
| TPH (as Gasoline)               | 107                         | (70 - 140)                  |            |                            | SW846 8015B   |
|                                 | 104                         | (70 - 140)                  | 2.8        | (0-40)                     | SW846 8015B   |
| <u>SURROGATE</u>                |                             | <u>PERCENT<br/>RECOVERY</u> |            | <u>RECOVERY<br/>LIMITS</u> |               |
| a,a,a-Trifluorotoluene<br>(TFT) |                             | 105                         |            | (60 - 130)                 |               |
|                                 |                             | 102                         |            | (60 - 130)                 |               |

**NOTE (S) :**

Calculations are performed before rounding to avoid round-off errors in calculated results.

**Bold print denotes control parameters**

000071

## MATRIX SPIKE SAMPLE DATA REPORT

## GC Volatiles

| PARAMETER                       | SAMPLE | SPIKE | MEASRD   | PERCNT     |        |     | METHOD      |  |
|---------------------------------|--------|-------|----------|------------|--------|-----|-------------|--|
|                                 | AMOUNT | AMT   | AMOUNT   | UNITS      | RECVRY | RPD |             |  |
| TPH (as Gasoline)               | ND     | 5.00  | 5.33     | mg/kg      | 107    |     | SW846 8015B |  |
|                                 | ND     | 5.00  | 5.19     | mg/kg      | 104    | 2.8 | SW846 8015B |  |
| PERCENT                         |        |       | RECOVERY |            |        |     |             |  |
| RECOVERY                        |        |       | LIMITS   |            |        |     |             |  |
| SURROGATE                       | 105    |       |          | (60 - 130) |        |     |             |  |
| a,a,a-Trifluorotoluene<br>(TFT) | 102    |       |          | (60 - 130) |        |     |             |  |

**NOTE (S) :**

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

000072

## MATRIX SPIKE SAMPLE EVALUATION REPORT

## GC Semivolatiles

Client Lot #....: E2F010157      Work Order #....: E2AD91AG-MS      Matrix.....: SOLID  
 MS Lot-Sample #: E2E310258-001      E2AD91AH-MSD  
 Date Sampled...: 05/31/02      Date Received...: 05/31/02 14:00      MS Run #.....: 2154216  
 Prep Date.....: 06/03/02      Analysis Date...: 06/04/02  
 Prep Batch #....: 2154442      Analysis Time...: 18:29  
 Dilution Factor: 100      Analyst ID.....: 356074      Instrument ID...: G02

| <u>PARAMETER</u>       | <u>PERCENT</u>  | <u>RECOVERY</u>   | <u>RPD</u> | <u>RPD</u>      | <u>METHOD</u>      |
|------------------------|-----------------|-------------------|------------|-----------------|--------------------|
|                        | <u>RECOVERY</u> | <u>LIMITS</u>     |            | <u>LIMITS</u>   |                    |
| <b>TPH (as Diesel)</b> | 0.0 NC,MS       | (55 - 130)        |            |                 | <b>SW846 8015B</b> |
|                        | 0.0 NC,MS       | (55 - 130)        | 0.0        | (0-35)          | <b>SW846 8015B</b> |
| <b>SURROGATE</b>       |                 | <u>PERCENT</u>    |            | <u>RECOVERY</u> |                    |
| Benzo (a) pyrene       |                 | <u>RECOVERY</u>   |            | <u>LIMITS</u>   |                    |
|                        |                 | 0.0               |            | (60 - 130)      |                    |
|                        |                 | Qualifiers: DIL,* |            |                 |                    |
|                        |                 | 0.0               |            | (60 - 130)      |                    |
|                        |                 | Qualifiers: DIL,* |            |                 |                    |

NOTE (S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

NC The recovery and/or RPD were not calculated.

MSB The recovery and RPD were not calculated because the sample amount was greater than four times the spike amount.

DIL The concentration is estimated or not reported due to dilution or the presence of interfering analytes.

\* Surrogate recovery is outside stated control limits.

000073

MATRIX SPIKE SAMPLE DATA REPORT

GC Semivolatiles

Client Lot #...: E2F010157      Work Order #...: E2AD91AG-MS      Matrix.....: SOLID  
 MS Lot-Sample #: E2E310258-001           E2AD91AH-MSD  
 Date Sampled...: 05/31/02      Date Received...: 05/31/02 14:00 MS Run #.....: 2154216  
 Prep Date.....: 06/03/02      Analysis Date...: 06/04/02  
 Prep Batch #...: 2154442      Analysis Time...: 18:29  
 Dilution Factor: 100      Analyst ID.....: 356074      Instrument ID.: G02

| PARAMETER              | SAMPLE | SPIKE | MEASRD             | PERCNT |            |     | METHOD             |
|------------------------|--------|-------|--------------------|--------|------------|-----|--------------------|
|                        | AMOUNT | AMT   | AMOUNT             | UNITS  | RECVRY     | RPD |                    |
| <b>TPH (as Diesel)</b> | 23000  | 250   |                    | mg/kg  | 0.0        |     | <b>SW846 8015B</b> |
|                        |        |       | Qualifiers: NC,MSB |        |            |     |                    |
|                        | 23000  | 250   |                    | mg/kg  | 0.0        | 0.0 | <b>SW846 8015B</b> |
|                        |        |       | Qualifiers: NC,MSB |        |            |     |                    |
| <b>SURROGATE</b>       |        |       | PERCENT            |        | RECOVERY   |     |                    |
| Benzo (a) pyrene       |        |       | RECOVERY           |        | LIMITS     |     |                    |
|                        |        |       | 0.0                |        | (60 - 130) |     |                    |
|                        |        |       | Qualifiers: DIL,*  |        |            |     |                    |
|                        |        |       | 0.0                |        | (60 - 130) |     |                    |
|                        |        |       | Qualifiers: DIL,*  |        |            |     |                    |

**NOTE(S) :**

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

NC The recovery and/or RPD were not calculated.

MSB The recovery and RPD were not calculated because the sample amount was greater than four times the spike amount.

DIL The concentration is estimated or not reported due to dilution or the presence of interfering analytes.

\* Surrogate recovery is outside stated control limits.

000074

**MATRIX SPIKE SAMPLE EVALUATION REPORT**

**TOTAL Metals**

**Client Lot #....:** E2F010157

**Matrix.....:** SOLID

**Date Sampled...:** 05/29/02 09:30 **Date Received...:** 05/29/02 17:35

| <b>PARAMETER</b>   | <b>PERCENT</b>  | <b>RECOVERY</b> | <b>RPD</b>              | <b>RPD</b> | <b>LIMITS</b>         | <b>METHOD</b> | <b>PREPARATION-</b>  | <b>WORK</b>    |
|--|-----------------|-----------------|-------------------------|------------|-----------------------|---------------|----------------------|----------------|
|  | <b>RECOVERY</b> | <b>LIMITS</b>   |                         |            |                       |               | <b>ANALYSIS DATE</b> | <b>ORDER #</b> |
| <b>MS Lot-Sample #:</b> E2E290277-010 <b>Prep Batch #....:</b> 2154211 |                 |                 |                         |            |                       |               |                      |                |
| Aluminum   | NC              | (70 - 115)      |                         | SW846      | 6010B                 |               | 06/03-06/04/02       | E16J41C9       |
|  | NC              | (70 - 115)      | (0-25)                  | SW846      | 6010B                 |               | 06/03-06/04/02       | E16J41DA       |
|  |                 |                 | Dilution Factor: 1      |            |                       |               |                      |                |
|  |                 |                 | Analysis Time...: 12:52 |            | Instrument ID...: M01 |               | Analyst ID.....:     | 021088         |
|  |                 |                 | MS Run #.....: 2154078  |            |                       |               |                      |                |
| Arsenic  | 97              | (75 - 115)      |                         | SW846      | 6010B                 |               | 06/03-06/04/02       | E16J41A2       |
|  | 99              | (75 - 115) 2.2  | (0-25)                  | SW846      | 6010B                 |               | 06/03-06/04/02       | E16J41A3       |
|  |                 |                 | Dilution Factor: 1      |            |                       |               |                      |                |
|  |                 |                 | Analysis Time...: 12:52 |            | Instrument ID...: M01 |               | Analyst ID.....:     | 021088         |
|  |                 |                 | MS Run #.....: 2154078  |            |                       |               |                      |                |
| Antimony   | 30 N            | (75 - 115)      |                         | SW846      | 6010B                 |               | 06/03-06/04/02       | E16J41A4       |
|  | 29 N            | (75 - 115) 4.0  | (0-25)                  | SW846      | 6010B                 |               | 06/03-06/04/02       | E16J41A5       |
|  |                 |                 | Dilution Factor: 1      |            |                       |               |                      |                |
|  |                 |                 | Analysis Time...: 12:52 |            | Instrument ID...: M01 |               | Analyst ID.....:     | 021088         |
|  |                 |                 | MS Run #.....: 2154078  |            |                       |               |                      |                |
| Barium   | 96              | (80 - 120)      |                         | SW846      | 6010B                 |               | 06/03-06/04/02       | E16J41A6       |
|  | 109             | (80 - 120) 10   | (0-25)                  | SW846      | 6010B                 |               | 06/03-06/04/02       | E16J41A7       |
|  |                 |                 | Dilution Factor: 1      |            |                       |               |                      |                |
|  |                 |                 | Analysis Time...: 12:52 |            | Instrument ID...: M01 |               | Analyst ID.....:     | 021088         |
|  |                 |                 | MS Run #.....: 2154078  |            |                       |               |                      |                |
| Cadmium  | 94              | (80 - 120)      |                         | SW846      | 6010B                 |               | 06/03-06/04/02       | E16J41A8       |
|  | 97              | (80 - 120) 2.8  | (0-25)                  | SW846      | 6010B                 |               | 06/03-06/04/02       | E16J41A9       |
|  |                 |                 | Dilution Factor: 1      |            |                       |               |                      |                |
|  |                 |                 | Analysis Time...: 12:52 |            | Instrument ID...: M01 |               | Analyst ID.....:     | 021088         |
|  |                 |                 | MS Run #.....: 2154078  |            |                       |               |                      |                |
| Chromium   | 105             | (85 - 120)      |                         | SW846      | 6010B                 |               | 06/03-06/04/02       | E16J41CA       |
|  | 127 N           | (85 - 120) 12   | (0-25)                  | SW846      | 6010B                 |               | 06/03-06/04/02       | E16J41CC       |
|  |                 |                 | Dilution Factor: 1      |            |                       |               |                      |                |
|  |                 |                 | Analysis Time...: 12:52 |            | Instrument ID...: M01 |               | Analyst ID.....:     | 021088         |
|  |                 |                 | MS Run #.....: 2154078  |            |                       |               |                      |                |
| Beryllium  | 99              | (80 - 120)      |                         | SW846      | 6010B                 |               | 06/03-06/04/02       | E16J41CD       |
|  | 103             | (80 - 120) 3.3  | (0-25)                  | SW846      | 6010B                 |               | 06/03-06/04/02       | E16J41CE       |
|  |                 |                 | Dilution Factor: 1      |            |                       |               |                      |                |
|  |                 |                 | Analysis Time...: 12:52 |            | Instrument ID...: M01 |               | Analyst ID.....:     | 021088         |
|  |                 |                 | MS Run #.....: 2154078  |            |                       |               |                      |                |

(Continued on next page)

**000075**

**MATRIX SPIKE SAMPLE EVALUATION REPORT**

**TOTAL Metals**

**Client Lot #....:** E2F010157

**Matrix.....:** SOLID

**Date Sampled...:** 05/29/02 09:30 **Date Received...:** 05/29/02 17:35

| PARAMETER  | PERCENT  | RECOVERY                | RPD    | METHOD                | PREPARATION-   | WORK                    |
|------------|----------|-------------------------|--------|-----------------------|----------------|-------------------------|
|            | RECOVERY | LIMITS                  | RPD    |                       | ANALYSIS DATE  | ORDER #                 |
| Lead       | 95       | (80 - 120)              |        | SW846 6010B           | 06/03-06/04/02 | E16J41CF                |
|            | 98       | (80 - 120) 3.0          | (0-25) | SW846 6010B           | 06/03-06/04/02 | E16J41CG                |
|            |          | Dilution Factor: 1      |        |                       |                |                         |
|            |          | Analysis Time...: 12:52 |        | Instrument ID...: M01 |                | Analyst ID.....: 021088 |
|            |          | MS Run #.....: 2154078  |        |                       |                |                         |
| Selenium   | 89       | (70 - 115)              |        | SW846 6010B           | 06/03-06/04/02 | E16J41CH                |
|            | 90       | (70 - 115) 1.2          | (0-25) | SW846 6010B           | 06/03-06/04/02 | E16J41CJ                |
|            |          | Dilution Factor: 1      |        |                       |                |                         |
|            |          | Analysis Time...: 12:52 |        | Instrument ID...: M01 |                | Analyst ID.....: 021088 |
|            |          | MS Run #.....: 2154078  |        |                       |                |                         |
| Silver     | 94       | (80 - 120)              |        | SW846 6010B           | 06/03-06/04/02 | E16J41CK                |
|            | 96       | (80 - 120) 2.6          | (0-25) | SW846 6010B           | 06/03-06/04/02 | E16J41CL                |
|            |          | Dilution Factor: 1      |        |                       |                |                         |
|            |          | Analysis Time...: 12:52 |        | Instrument ID...: M01 |                | Analyst ID.....: 021088 |
|            |          | MS Run #.....: 2154078  |        |                       |                |                         |
| Cobalt     | 94       | (80 - 120)              |        | SW846 6010B           | 06/03-06/04/02 | E16J41CM                |
|            | 99       | (80 - 120) 4.2          | (0-25) | SW846 6010B           | 06/03-06/04/02 | E16J41CN                |
|            |          | Dilution Factor: 1      |        |                       |                |                         |
|            |          | Analysis Time...: 12:52 |        | Instrument ID...: M01 |                | Analyst ID.....: 021088 |
|            |          | MS Run #.....: 2154078  |        |                       |                |                         |
| Copper     | 98       | (80 - 120)              |        | SW846 6010B           | 06/03-06/04/02 | E16J41CP                |
|            | 112      | (80 - 120) 9.8          | (0-25) | SW846 6010B           | 06/03-06/04/02 | E16J41CQ                |
|            |          | Dilution Factor: 1      |        |                       |                |                         |
|            |          | Analysis Time...: 12:52 |        | Instrument ID...: M01 |                | Analyst ID.....: 021088 |
|            |          | MS Run #.....: 2154078  |        |                       |                |                         |
| Molybdenum | 93       | (80 - 120)              |        | SW846 6010B           | 06/03-06/04/02 | E16J41CR                |
|            | 94       | (80 - 120) 1.8          | (0-25) | SW846 6010B           | 06/03-06/04/02 | E16J41CT                |
|            |          | Dilution Factor: 1      |        |                       |                |                         |
|            |          | Analysis Time...: 12:52 |        | Instrument ID...: M01 |                | Analyst ID.....: 021088 |
|            |          | MS Run #.....: 2154078  |        |                       |                |                         |
| Nickel     | 94       | (80 - 120)              |        | SW846 6010B           | 06/03-06/04/02 | E16J41CU                |
|            | 100      | (80 - 120) 4.9          | (0-25) | SW846 6010B           | 06/03-06/04/02 | E16J41CV                |
|            |          | Dilution Factor: 1      |        |                       |                |                         |
|            |          | Analysis Time...: 12:52 |        | Instrument ID...: M01 |                | Analyst ID.....: 021088 |
|            |          | MS Run #.....: 2154078  |        |                       |                |                         |

(Continued on next page)

**000076**

MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #....: E2F010157

Matrix.....: SOLID

Date Sampled...: 05/29/02 09:30 Date Received..: 05/29/02 17:35

| PARAMETER  | PERCENT  | RECOVERY                | RPD        | METHOD                | PREPARATION-   | WORK                    |
|--|----------|-------------------------|------------|-----------------------|----------------|-------------------------|
|  | RECOVERY | LIMITS                  | RPD        |                       | ANALYSIS DATE  | ORDER #                 |
| Thallium   | 95       | (75 - 125)              |            | SW846 6010B           | 06/03-06/04/02 | E16J41CW                |
|  | 97       | (75 - 125)              | 1.7 (0-25) | SW846 6010B           | 06/03-06/04/02 | E16J41CX                |
|  |          | Dilution Factor: 1      |            |                       |                |                         |
|  |          | Analysis Time...: 12:52 |            | Instrument ID...: M01 |                | Analyst ID.....: 021088 |
|  |          | MS Run #.....: 2154078  |            |                       |                |                         |
| Vanadium   | 96       | (80 - 120)              |            | SW846 6010B           | 06/03-06/04/02 | E16J41C0                |
|  | 111      | (80 - 120)              | 9.9 (0-25) | SW846 6010B           | 06/03-06/04/02 | E16J41C1                |
|  |          | Dilution Factor: 1      |            |                       |                |                         |
|  |          | Analysis Time...: 12:52 |            | Instrument ID...: M01 |                | Analyst ID.....: 021088 |
|  |          | MS Run #.....: 2154078  |            |                       |                |                         |
| Zinc   | 91       | (80 - 120)              |            | SW846 6010B           | 06/03-06/04/02 | E16J41C2                |
|  | 107      | (80 - 120)              | 10 (0-25)  | SW846 6010B           | 06/03-06/04/02 | E16J41C3                |
|  |          | Dilution Factor: 1      |            |                       |                |                         |
|  |          | Analysis Time...: 12:52 |            | Instrument ID...: M01 |                | Analyst ID.....: 021088 |
|  |          | MS Run #.....: 2154078  |            |                       |                |                         |
| <b>MS Lot-Sample #:</b> E2E290277-010 <b>Prep Batch #....:</b> 2154215 |          |                         |            |                       |                |                         |
| Mercury  | 112      | (80 - 120)              |            | SW846 7471A           | 06/03-06/07/02 | E16J41C4                |
|  | 123 N    | (80 - 120)              | 9.4 (0-20) | SW846 7471A           | 06/03-06/07/02 | E16J41C5                |
|  |          | Dilution Factor: 1      |            |                       |                |                         |
|  |          | Analysis Time...: 09:31 |            | Instrument ID...: M04 |                | Analyst ID.....: 000023 |
|  |          | MS Run #.....: 2154083  |            |                       |                |                         |

**NOTE(S) :**

Calculations are performed before rounding to avoid round-off errors in calculated results.

N Spiked analyte recovery is outside stated control limits.

NC The recovery and/or RPD were not calculated.

000077

**MATRIX SPIKE SAMPLE DATA REPORT**

**TOTAL Metals**

**Client Lot #....:** E2F010157

**Matrix.....:** SOLID

**Date Sampled...:** 05/29/02 09:30 **Date Received...:** 05/29/02 17:35

| <u>PARAMETER</u>   | <u>SAMPLE AMOUNT</u> | <u>SPIKE AMT</u> | <u>MEASRD AMOUNT</u> | <u>UNITS</u>            | <u>PERCNT RECVRY</u> | <u>RPD</u> | <u>METHOD</u>         | <u>PREPARATION- ANALYSIS DATE</u> | <u>WORK ORDER #</u>     |
|--|----------------------|------------------|----------------------|-------------------------|----------------------|------------|-----------------------|-----------------------------------|-------------------------|
| <b>MS Lot-Sample #:</b> E2E290277-010 <b>Prep Batch #....:</b> 2154211 |                      |                  |                      |                         |                      |            |                       |                                   |                         |
| <b>Aluminum</b>  |                      |                  |                      |                         |                      |            |                       |                                   |                         |
|  | 5560                 | 200              | 6650                 | NC mg/kg                |                      |            | SW846 6010B           | 06/03-06/04/02                    | E16J41C9                |
|  | 5560                 | 200              | 8530                 | NC mg/kg                |                      |            | SW846 6010B           | 06/03-06/04/02                    | E16J41DA                |
|  |                      |                  |                      | Dilution Factor: 1      |                      |            |                       |                                   |                         |
|  |                      |                  |                      | Analysis Time...: 12:52 |                      |            | Instrument ID...: M01 |                                   | Analyst ID.....: 021088 |
|  |                      |                  |                      | MS Run #.....: 2154078  |                      |            |                       |                                   |                         |
| <b>Arsenic</b>   |                      |                  |                      |                         |                      |            |                       |                                   |                         |
|  | 2.9                  | 200              | 196                  | mg/kg                   | 97                   |            | SW846 6010B           | 06/03-06/04/02                    | E16J41A2                |
|  | 2.9                  | 200              | 201                  | mg/kg                   | 99                   | 2.2        | SW846 6010B           | 06/03-06/04/02                    | E16J41A3                |
|  |                      |                  |                      | Dilution Factor: 1      |                      |            |                       |                                   |                         |
|  |                      |                  |                      | Analysis Time...: 12:52 |                      |            | Instrument ID...: M01 |                                   | Analyst ID.....: 021088 |
|  |                      |                  |                      | MS Run #.....: 2154078  |                      |            |                       |                                   |                         |
| <b>Antimony</b>  |                      |                  |                      |                         |                      |            |                       |                                   |                         |
|  | ND                   | 50.0             | 14.9                 | N mg/kg                 | 30                   |            | SW846 6010B           | 06/03-06/04/02                    | E16J41A4                |
|  | ND                   | 50.0             | 14.3                 | N mg/kg                 | 29                   | 4.0        | SW846 6010B           | 06/03-06/04/02                    | E16J41A5                |
|  |                      |                  |                      | Dilution Factor: 1      |                      |            |                       |                                   |                         |
|  |                      |                  |                      | Analysis Time...: 12:52 |                      |            | Instrument ID...: M01 |                                   | Analyst ID.....: 021088 |
|  |                      |                  |                      | MS Run #.....: 2154078  |                      |            |                       |                                   |                         |
| <b>Barium</b>  |                      |                  |                      |                         |                      |            |                       |                                   |                         |
|  | 47.3                 | 200              | 240                  | mg/kg                   | 96                   |            | SW846 6010B           | 06/03-06/04/02                    | E16J41A6                |
|  | 47.3                 | 200              | 266                  | mg/kg                   | 109                  | 10         | SW846 6010B           | 06/03-06/04/02                    | E16J41A7                |
|  |                      |                  |                      | Dilution Factor: 1      |                      |            |                       |                                   |                         |
|  |                      |                  |                      | Analysis Time...: 12:52 |                      |            | Instrument ID...: M01 |                                   | Analyst ID.....: 021088 |
|  |                      |                  |                      | MS Run #.....: 2154078  |                      |            |                       |                                   |                         |
| <b>Cadmium</b>   |                      |                  |                      |                         |                      |            |                       |                                   |                         |
|  | 0.11                 | 5.00             | 4.81                 | mg/kg                   | 94                   |            | SW846 6010B           | 06/03-06/04/02                    | E16J41A8                |
|  | 0.11                 | 5.00             | 4.95                 | mg/kg                   | 97                   | 2.8        | SW846 6010B           | 06/03-06/04/02                    | E16J41A9                |
|  |                      |                  |                      | Dilution Factor: 1      |                      |            |                       |                                   |                         |
|  |                      |                  |                      | Analysis Time...: 12:52 |                      |            | Instrument ID...: M01 |                                   | Analyst ID.....: 021088 |
|  |                      |                  |                      | MS Run #.....: 2154078  |                      |            |                       |                                   |                         |
| <b>Chromium</b>  |                      |                  |                      |                         |                      |            |                       |                                   |                         |
|  | 12.4                 | 20.0             | 33.5                 | mg/kg                   | 105                  |            | SW846 6010B           | 06/03-06/04/02                    | E16J41CA                |
|  | 12.4                 | 20.0             | 37.9                 | N mg/kg                 | 127                  | 12         | SW846 6010B           | 06/03-06/04/02                    | E16J41CC                |
|  |                      |                  |                      | Dilution Factor: 1      |                      |            |                       |                                   |                         |
|  |                      |                  |                      | Analysis Time...: 12:52 |                      |            | Instrument ID...: M01 |                                   | Analyst ID.....: 021088 |
|  |                      |                  |                      | MS Run #.....: 2154078  |                      |            |                       |                                   |                         |

(Continued on next page)

**000078**

**MATRIX SPIKE SAMPLE DATA REPORT**

**TOTAL Metals**

**Client Lot #....:** E2F010157

**Matrix.....:** SOLID

**Date Sampled...:** 05/29/02 09:30 **Date Received...:** 05/29/02 17:35

| PARAMETER        | SAMPLE | SPIKE | MEASRD            | PERCNT  |        |     | PREPARATION-<br>ANALYSIS DATE | WORK<br>ORDER #         |
|------------------|--------|-------|-------------------|---------|--------|-----|-------------------------------|-------------------------|
|                  | AMOUNT | AMT   | AMOUNT            | UNITS   | RECVRY | RPD | METHOD                        |                         |
| <b>Beryllium</b> |        |       |                   |         |        |     |                               |                         |
|                  | 0.31   | 5.00  | 5.26              | mg/kg   | 99     |     | SW846 6010B                   | 06/03-06/04/02 E16J41CD |
|                  | 0.31   | 5.00  | 5.44              | mg/kg   | 103    | 3.3 | SW846 6010B                   | 06/03-06/04/02 E16J41CE |
|                  |        |       | Dilution Factor:  | 1       |        |     |                               |                         |
|                  |        |       | Analysis Time...: | 12:52   |        |     | Instrument ID...: M01         | Analyst ID.....: 021088 |
|                  |        |       | MS Run #.....:    | 2154078 |        |     |                               |                         |
| <b>Lead</b>      |        |       |                   |         |        |     |                               |                         |
|                  | 2.5    | 50.0  | 50.0              | mg/kg   | 95     |     | SW846 6010B                   | 06/03-06/04/02 E16J41CF |
|                  | 2.5    | 50.0  | 51.6              | mg/kg   | 98     | 3.0 | SW846 6010B                   | 06/03-06/04/02 E16J41CG |
|                  |        |       | Dilution Factor:  | 1       |        |     |                               |                         |
|                  |        |       | Analysis Time...: | 12:52   |        |     | Instrument ID...: M01         | Analyst ID.....: 021088 |
|                  |        |       | MS Run #.....:    | 2154078 |        |     |                               |                         |
| <b>Selenium</b>  |        |       |                   |         |        |     |                               |                         |
|                  | 0.87   | 200   | 179               | mg/kg   | 89     |     | SW846 6010B                   | 06/03-06/04/02 E16J41CH |
|                  | 0.87   | 200   | 182               | mg/kg   | 90     | 1.2 | SW846 6010B                   | 06/03-06/04/02 E16J41CJ |
|                  |        |       | Dilution Factor:  | 1       |        |     |                               |                         |
|                  |        |       | Analysis Time...: | 12:52   |        |     | Instrument ID...: M01         | Analyst ID.....: 021088 |
|                  |        |       | MS Run #.....:    | 2154078 |        |     |                               |                         |
| <b>Silver</b>    |        |       |                   |         |        |     |                               |                         |
|                  | ND     | 5.00  | 4.68              | mg/kg   | 94     |     | SW846 6010B                   | 06/03-06/04/02 E16J41CK |
|                  | ND     | 5.00  | 4.81              | mg/kg   | 96     | 2.6 | SW846 6010B                   | 06/03-06/04/02 E16J41CL |
|                  |        |       | Dilution Factor:  | 1       |        |     |                               |                         |
|                  |        |       | Analysis Time...: | 12:52   |        |     | Instrument ID...: M01         | Analyst ID.....: 021088 |
|                  |        |       | MS Run #.....:    | 2154078 |        |     |                               |                         |
| <b>Cobalt</b>    |        |       |                   |         |        |     |                               |                         |
|                  | 4.0    | 50.0  | 51.1              | mg/kg   | 94     |     | SW846 6010B                   | 06/03-06/04/02 E16J41CM |
|                  | 4.0    | 50.0  | 53.3              | mg/kg   | 99     | 4.2 | SW846 6010B                   | 06/03-06/04/02 E16J41CN |
|                  |        |       | Dilution Factor:  | 1       |        |     |                               |                         |
|                  |        |       | Analysis Time...: | 12:52   |        |     | Instrument ID...: M01         | Analyst ID.....: 021088 |
|                  |        |       | MS Run #.....:    | 2154078 |        |     |                               |                         |
| <b>Copper</b>    |        |       |                   |         |        |     |                               |                         |
|                  | 8.9    | 25.0  | 33.4              | mg/kg   | 98     |     | SW846 6010B                   | 06/03-06/04/02 E16J41CP |
|                  | 8.9    | 25.0  | 36.9              | mg/kg   | 112    | 9.8 | SW846 6010B                   | 06/03-06/04/02 E16J41CQ |
|                  |        |       | Dilution Factor:  | 1       |        |     |                               |                         |
|                  |        |       | Analysis Time...: | 12:52   |        |     | Instrument ID...: M01         | Analyst ID.....: 021088 |
|                  |        |       | MS Run #.....:    | 2154078 |        |     |                               |                         |

(Continued on next page)

**000079**

**MATRIX SPIKE SAMPLE DATA REPORT**

**TOTAL Metals**

**Client Lot #....:** E2F010157

**Matrix.....:** SOLID

**Date Sampled....:** 05/29/02 09:30 **Date Received...:** 05/29/02 17:35

| PARAMETER         | SAMPLE                  | SPIKE | MEASRD | PERCNT |        |     | PREPARATION- | WORK                    |
|-------------------|-------------------------|-------|--------|--------|--------|-----|--------------|-------------------------|
|                   | AMOUNT                  | AMT   | AMOUNT | UNITS  | RECVRY | RPD |              |                         |
| <b>Molybdenum</b> |                         |       |        |        |        |     |              |                         |
|                   | 1.3                     | 100   | 93.8   | mg/kg  | 93     |     | SW846 6010B  | 06/03-06/04/02 E16J41CR |
|                   | 1.3                     | 100   | 95.6   | mg/kg  | 94     | 1.8 | SW846 6010B  | 06/03-06/04/02 E16J41CT |
|                   | Dilution Factor: 1      |       |        |        |        |     |              |                         |
|                   | Analysis Time...: 12:52 |       |        |        |        |     |              |                         |
|                   | MS Run #.....: 2154078  |       |        |        |        |     |              |                         |
| <b>Nickel</b>     |                         |       |        |        |        |     |              |                         |
|                   | 9.9                     | 50.0  | 57.1   | mg/kg  | 94     |     | SW846 6010B  | 06/03-06/04/02 E16J41CU |
|                   | 9.9                     | 50.0  | 60.0   | mg/kg  | 100    | 4.9 | SW846 6010B  | 06/03-06/04/02 E16J41CV |
|                   | Dilution Factor: 1      |       |        |        |        |     |              |                         |
|                   | Analysis Time...: 12:52 |       |        |        |        |     |              |                         |
|                   | MS Run #.....: 2154078  |       |        |        |        |     |              |                         |
| <b>Thallium</b>   |                         |       |        |        |        |     |              |                         |
|                   | ND                      | 200   | 191    | mg/kg  | 95     |     | SW846 6010B  | 06/03-06/04/02 E16J41CW |
|                   | ND                      | 200   | 194    | mg/kg  | 97     | 1.7 | SW846 6010B  | 06/03-06/04/02 E16J41CX |
|                   | Dilution Factor: 1      |       |        |        |        |     |              |                         |
|                   | Analysis Time...: 12:52 |       |        |        |        |     |              |                         |
|                   | MS Run #.....: 2154078  |       |        |        |        |     |              |                         |
| <b>Vanadium</b>   |                         |       |        |        |        |     |              |                         |
|                   | 21.5                    | 50.0  | 69.7   | mg/kg  | 96     |     | SW846 6010B  | 06/03-06/04/02 E16J41C0 |
|                   | 21.5                    | 50.0  | 77.0   | mg/kg  | 111    | 9.9 | SW846 6010B  | 06/03-06/04/02 E16J41C1 |
|                   | Dilution Factor: 1      |       |        |        |        |     |              |                         |
|                   | Analysis Time...: 12:52 |       |        |        |        |     |              |                         |
|                   | MS Run #.....: 2154078  |       |        |        |        |     |              |                         |
| <b>Zinc</b>       |                         |       |        |        |        |     |              |                         |
|                   | 30.0                    | 50.0  | 75.4   | mg/kg  | 91     |     | SW846 6010B  | 06/03-06/04/02 E16J41C2 |
|                   | 30.0                    | 50.0  | 83.7   | mg/kg  | 107    | 10  | SW846 6010B  | 06/03-06/04/02 E16J41C3 |
|                   | Dilution Factor: 1      |       |        |        |        |     |              |                         |
|                   | Analysis Time...: 12:52 |       |        |        |        |     |              |                         |
|                   | MS Run #.....: 2154078  |       |        |        |        |     |              |                         |

**MS Lot-Sample #:** E2E290277-010 **Prep Batch #....:** 2154215

**Mercury**

|                    |                         |         |       |     |     |             |                         |  |
|--------------------|-------------------------|---------|-------|-----|-----|-------------|-------------------------|--|
| ND                 | 0.167                   | 0.187   | mg/kg | 112 |     | SW846 7471A | 06/03-06/07/02 E16J41C4 |  |
| ND                 | 0.167                   | 0.205 N | mg/kg | 123 | 9.4 | SW846 7471A | 06/03-06/07/02 E16J41C5 |  |
| Dilution Factor: 1 |                         |         |       |     |     |             |                         |  |
|                    | Analysis Time...: 09:31 |         |       |     |     |             |                         |  |
|                    | MS Run #.....: 2154083  |         |       |     |     |             |                         |  |

**NOTE(S) :**

Calculations are performed before rounding to avoid round-off errors in calculated results.

N Spiked analyte recovery is outside stated control limits.

NC The recovery and/or RPD were not calculated.

**000080**



# Subcontract Reports

**000081**



# Del Mar Analytical

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STL Los Angeles  
1721 S Grand Avenue  
Santa Ana, CA 92706  
Attention: Diane Suzuki

Client Project ID E2F010157  
Report Number: PLF0033

Sampled: 05/31/02  
Received: 06/04/02  
Issued: 6/20/02

## CASE NARRATIVE

| LABORATORY NUMBER | SAMPLE DESCRIPTION | SAMPLE MATRIX |
|-------------------|--------------------|---------------|
| PLF0033-01RE1     | SP-37              | Soil          |
| PLF0033-02RE1     | SP-36              | Soil          |
| PLF0033-03        | SP-38              | Soil          |

SAMPLE RECEIPT: Samples were received intact, on ice, at 10°C, and with chain of custody documentation.

HOLDING TIMES: Holding times were met.

PRESERVATION: Samples requiring preservation were verified prior to sample analysis.

OBSERVATIONS: No significant observations were made.

SUBCONTRACTED: No analyses were subcontracted.

QA/QC CRITERIA: All analyses met method criteria.

EXPLANATION OF DATA QUALIFIERS: No further explanation of data qualifiers needed.

Del Mar Analytical, Phoenix (ELAP I-2446/NELAP# 01109CA)

Nicole Beck For Debbie Fuller  
Project Manager

PLF0033

Page 1 of 12

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000082

BOE-C6-0003360



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STL Los Angeles  
1721 S Grand Avenue  
Santa Ana, CA 92706  
Attention: Diane Suzuki

Client Project ID: E2F010157  
Report Number: PLF0033

Sampled: 05/31/02  
Received: 06/04/02

## CASE NARRATIVE

### HPLC CALIBRATION CHECK CRITERIA POLYNUCLEAR AROMATIC HYDROCARBONS (EPA 8310)

Per Method 8000B of SW-846, the percent recovery of the calibration checks for HPLC analyses must be within  $\pm$  15% from the true value for each individual compound or the average % recovery of all compounds in the calibration check solution must be within  $\pm$  15% recovery. Per Method 8000B, the end user is to be notified if the latter situation occurs.

The % recovery for the following individual compounds fell outside the  $\pm$  15% criteria, however the average % recovery of all compounds in the calibration check solution was within  $\pm$  15%, thus meeting the overall calibration check criteria.

| Compound              | Footnote | Calibration Check |               |         |
|-----------------------|----------|-------------------|---------------|---------|
|                       |          | % Recovery        | Lab Number    | Batch   |
| Benzo(a)pyrene        | 2        | 79.60%            | P2F1317-BLK1  | P2F1317 |
| Benzo(b)fluoranthene  | 1        | 117.73%           | P2F1317-BLK1  | P2F1317 |
| Benzo(g,h,i)perylene  | 1        | 124.17%           | P2F1317-BLK1  | P2F1317 |
| Dibenz(a,h)anthracene | 1        | 122.28%           | P2F1317-BLK1  | P2F1317 |
| Chrysene              | 1        | 117.38%           | P2F1317-BS1   | P2F1317 |
| Benzo(a)pyrene        | 2        | 79.60%            | P2F1317-BSD1  | P2F1317 |
| Benzo(b)fluoranthene  | 1        | 117.73%           | P2F1317-BSD1  | P2F1317 |
| Benzo(g,h,i)perylene  | 1        | 124.17%           | P2F1317-BSD1  | P2F1317 |
| Dibenz(a,h)anthracene | 1        | 122.28%           | P2F1317-BSD1  | P2F1317 |
| Benzo(a)pyrene        | 2        | 79.60%            | P2F1317-MS1   | P2F1317 |
| Benzo(b)fluoranthene  | 1        | 117.73%           | P2F1317-MS1   | P2F1317 |
| Benzo(g,h,i)perylene  | 1        | 124.17%           | P2F1317-MS1   | P2F1317 |
| Dibenz(a,h)anthracene | 1        | 122.28%           | P2F1317-MS1   | P2F1317 |
| Benzo(a)pyrene        | 2        | 79.60%            | P2F1317-MSD1  | P2F1317 |
| Benzo(b)fluoranthene  | 1        | 117.73%           | P2F1317-MSD1  | P2F1317 |
| Benzo(g,h,i)perylene  | 1        | 124.17%           | P2F1317-MSD1  | P2F1317 |
| Dibenz(a,h)anthracene | 1        | 122.28%           | P2F1317-MSD1  | P2F1317 |
| Benzo(a)pyrene        | 2        | 79.60%            | PLF0033-01RE1 | P2F1317 |

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Project Manager

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STL Los Angeles  
1721 S Grand Avenue  
Santa Ana, CA 92706  
Attention: Diane Suzuki

Client Project ID: E2F010157  
Report Number: PLF0033

Sampled: 05/31/02  
Received: 06/04/02

## CASE NARRATIVE

### HPLC CALIBRATION CHECK CRITERIA POLYNUCLEAR AROMATIC HYDROCARBONS (EPA 8310)

Per Method 8000B of SW-846, the percent recovery of the calibration checks for HPLC analyses must be within  $\pm$  15% from the true value for each individual compound or the average % recovery of all compounds in the calibration check solution must be within  $\pm$  15% recovery. Per Method 8000B, the end user is to be notified if the latter situation occurs.

The % recovery for the following individual compounds fell outside the  $\pm$  15% criteria, however the average % recovery of all compounds in the calibration check solution was within  $\pm$  15%, thus meeting the overall calibration check criteria.

| <u>Compound</u>       | <u>Footnote</u> | <u>Calibration Check</u> | <u>Lab Number</u> | <u>Batch</u> |
|-----------------------|-----------------|--------------------------|-------------------|--------------|
|                       |                 | <u>% Recovery</u>        |                   |              |
| Benzo(b)fluoranthene  | 1               | 117.73%                  | PLF0033-01RE1     | P2F1317      |
| Benzo(g,h,i)perylene  | 1               | 124.17%                  | PLF0033-01RE1     | P2F1317      |
| Dibenz(a,h)anthracene | 1               | 122.28%                  | PLF0033-01RE1     | P2F1317      |
| Benzo(b)fluoranthene  | 1               | 117.73%                  | PLF0033-02RE1     | P2F1317      |
| Benzo(g,h,i)perylene  | 1               | 124.17%                  | PLF0033-02RE1     | P2F1317      |
| Dibenz(a,h)anthracene | 1               | 122.28%                  | PLF0033-02RE1     | P2F1317      |

#### Footnotes:

- 1 The calibration demonstrated a high bias for this compound. Samples were flagged to indicate a possible high bias in the result for this compound.
- 2 The calibration demonstrated a low bias for this compound. Samples were flagged to indicate a possible low bias in the result for this compound.

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STL Los Angeles  
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 Santa Ana, CA 92706  
 Attention: Diane Suzuki

Client Project ID: E2F010157

Sampled: 05/31/02  
 Received: 06/04/02

Report Number: PLF0033

## POLYNUCLEAR AROMATIC HYDROCARBONS (EPA 8310)

| Analyte  | Method   | Batch   | Reporting Limit<br>ug/kg | Sample Result<br>ug/kg | Dilution Factor | Date Extracted | Date Analyzed | Data Qualifiers |
|--|----------|---------|--------------------------|------------------------|-----------------|----------------|---------------|-----------------|
| <b>Sample ID: PLF0033-01RE1 (SP-37 - Soil)</b> |          |         |                          |                        |                 |                |               |                 |
| Acenaphthene                                   | EPA 8310 | P2F1317 | 50                       | ND                     | 1               | 6/13/02        | 6/18/02       |                 |
| Acenaphthylene                                 | EPA 8310 | P2F1317 | 200                      | ND                     | 1               | 6/13/02        | 6/18/02       |                 |
| Anthracene                                     | EPA 8310 | P2F1317 | 2.0                      | ND                     | 1               | 6/13/02        | 6/18/02       |                 |
| Benz(a)anthracene                              | EPA 8310 | P2F1317 | 2.0                      | ND                     | 1               | 6/13/02        | 6/18/02       |                 |
| Benzo(a)pyrene                                 | EPA 8310 | P2F1317 | 2.0                      | ND                     | 1               | 6/13/02        | 6/18/02       | C2              |
| Benzo(b)fluoranthene                           | EPA 8310 | P2F1317 | 5.0                      | ND                     | 1               | 6/13/02        | 6/18/02       | C1b             |
| Benzo(g,h,i)perylene                           | EPA 8310 | P2F1317 | 5.0                      | ND                     | 1               | 6/13/02        | 6/18/02       | C1f             |
| Benzo(k)fluoranthene                           | EPA 8310 | P2F1317 | 2.0                      | ND                     | 1               | 6/13/02        | 6/18/02       |                 |
| Chrysene                                       | EPA 8310 | P2F1317 | 5.0                      | ND                     | 1               | 6/13/02        | 6/18/02       |                 |
| Dibenz(a,h)anthracene                          | EPA 8310 | P2F1317 | 5.0                      | ND                     | 1               | 6/13/02        | 6/18/02       | C1d             |
| Fluoranthene                                   | EPA 8310 | P2F1317 | 5.0                      | ND                     | 1               | 6/13/02        | 6/18/02       |                 |
| Fluorene                                       | EPA 8310 | P2F1317 | 5.0                      | ND                     | 1               | 6/13/02        | 6/18/02       |                 |
| Indeno(1,2,3-cd)pyrene                         | EPA 8310 | P2F1317 | 5.0                      | ND                     | 1               | 6/13/02        | 6/18/02       |                 |
| Naphthalene                                    | EPA 8310 | P2F1317 | 40                       | ND                     | 1               | 6/13/02        | 6/18/02       |                 |
| Phenanthrene                                   | EPA 8310 | P2F1317 | 5.0                      | ND                     | 1               | 6/13/02        | 6/18/02       |                 |
| Pyrene   | EPA 8310 | P2F1317 | 5.0                      | ND                     | 1               | 6/13/02        | 6/18/02       |                 |
| <i>Surrogate: 2-Methylanthracene (50-115%)</i> |          |         |                          |                        |                 | 87 %           |               |                 |
| <b>Sample ID: PLF0033-02RE1 (SP-36 - Soil)</b> |          |         |                          |                        |                 |                |               |                 |
| Acenaphthene                                   | EPA 8310 | P2F1317 | 50                       | ND                     | 1               | 6/13/02        | 6/18/02       |                 |
| Acenaphthylene                                 | EPA 8310 | P2F1317 | 200                      | ND                     | 1               | 6/13/02        | 6/18/02       |                 |
| Anthracene                                     | EPA 8310 | P2F1317 | 2.0                      | ND                     | 1               | 6/13/02        | 6/18/02       |                 |
| Benz(a)anthracene                              | EPA 8310 | P2F1317 | 2.0                      | ND                     | 1               | 6/13/02        | 6/18/02       |                 |
| Benzo(a)pyrene                                 | EPA 8310 | P2F1317 | 2.0                      | 3.1                    | 1               | 6/13/02        | 6/19/02       |                 |
| Benzo(b)fluoranthene                           | EPA 8310 | P2F1317 | 5.0                      | ND                     | 1               | 6/13/02        | 6/18/02       | C1b             |
| Benzo(g,h,i)perylene                           | EPA 8310 | P2F1317 | 5.0                      | ND                     | 1               | 6/13/02        | 6/18/02       | C1f             |
| Benzo(k)fluoranthene                           | EPA 8310 | P2F1317 | 2.0                      | ND                     | 1               | 6/13/02        | 6/18/02       |                 |
| Chrysene                                       | EPA 8310 | P2F1317 | 5.0                      | ND                     | 1               | 6/13/02        | 6/18/02       |                 |
| Dibenz(a,h)anthracene                          | EPA 8310 | P2F1317 | 5.0                      | ND                     | 1               | 6/13/02        | 6/18/02       | C1d             |
| Fluoranthene                                   | EPA 8310 | P2F1317 | 5.0                      | ND                     | 1               | 6/13/02        | 6/18/02       |                 |
| Fluorene                                       | EPA 8310 | P2F1317 | 5.0                      | ND                     | 1               | 6/13/02        | 6/18/02       |                 |
| Indeno(1,2,3-cd)pyrene                         | EPA 8310 | P2F1317 | 5.0                      | ND                     | 1               | 6/13/02        | 6/18/02       |                 |
| Naphthalene                                    | EPA 8310 | P2F1317 | 40                       | ND                     | 1               | 6/13/02        | 6/18/02       |                 |
| Phenanthrene                                   | EPA 8310 | P2F1317 | 5.0                      | ND                     | 1               | 6/13/02        | 6/18/02       |                 |
| Pyrene   | EPA 8310 | P2F1317 | 5.0                      | ND                     | 1               | 6/13/02        | 6/18/02       |                 |
| <i>Surrogate: 2-Methylanthracene (50-115%)</i> |          |         |                          |                        |                 | 88 %           |               |                 |

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 Project Manager

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STL Los Angeles  
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 Santa Ana, CA 92706  
 Attention: Diane Suzuki

Client Project ID: E2F010157  
 Report Number: PLF0033

Sampled: 05/31/02  
 Received: 06/04/02

### POLYNUCLEAR AROMATIC HYDROCARBONS (EPA 8310)

| Analyte                                     | Method   | Batch   | Reporting Limit<br>ug/kg | Sample Result<br>ug/kg | Dilution Factor | Date Extracted | Date Analyzed | Data Qualifiers |
|---|----------|---------|--------------------------|------------------------|-----------------|----------------|---------------|-----------------|
| <b>Sample ID: PLF0033-03 (SP-38 - Soil)</b> |          |         |                          |                        |                 |                |               |                 |
| Acenaphthene                                | EPA 8310 | P2F1106 | 100                      | ND                     | 1               | 6/11/02        | 6/15/02       |                 |
| <b>Acenaphthylene</b>                       | EPA 8310 | P2F1106 | 400                      | <b>620</b>             | 1               | 6/11/02        | 6/15/02       |                 |
| Anthracene                                  | EPA 8310 | P2F1106 | 4.0                      | ND                     | 1               | 6/11/02        | 6/15/02       |                 |
| Benz(a)anthracene                           | EPA 8310 | P2F1106 | 4.0                      | ND                     | 1               | 6/11/02        | 6/15/02       |                 |
| Benzo(a)pyrene                              | EPA 8310 | P2F1106 | 4.0                      | ND                     | 1               | 6/11/02        | 6/15/02       |                 |
| Benzo(b)fluoranthene                        | EPA 8310 | P2F1106 | 10                       | ND                     | 1               | 6/11/02        | 6/15/02       |                 |
| Benzo(g,h,i)perylene                        | EPA 8310 | P2F1106 | 10                       | ND                     | 1               | 6/11/02        | 6/15/02       |                 |
| Benzo(k)fluoranthene                        | EPA 8310 | P2F1106 | 4.0                      | ND                     | 1               | 6/11/02        | 6/15/02       |                 |
| Chrysene                                    | EPA 8310 | P2F1106 | 10                       | ND                     | 1               | 6/11/02        | 6/15/02       |                 |
| Dibenz(a,h)anthracene                       | EPA 8310 | P2F1106 | 10                       | ND                     | 1               | 6/11/02        | 6/15/02       |                 |
| Fluoranthene                                | EPA 8310 | P2F1106 | 10                       | ND                     | 1               | 6/11/02        | 6/15/02       |                 |
| Fluorene                                    | EPA 8310 | P2F1106 | 10                       | ND                     | 1               | 6/11/02        | 6/15/02       |                 |
| Indeno(1,2,3-cd)pyrene                      | EPA 8310 | P2F1106 | 10                       | ND                     | 1               | 6/11/02        | 6/15/02       |                 |
| Naphthalene                                 | EPA 8310 | P2F1106 | 80                       | ND                     | 1               | 6/11/02        | 6/15/02       |                 |
| Phenanthrene                                | EPA 8310 | P2F1106 | 10                       | ND                     | 1               | 6/11/02        | 6/15/02       |                 |
| Pyrene                                      | EPA 8310 | P2F1106 | 10                       | ND                     | 1               | 6/11/02        | 6/15/02       |                 |

*Surrogate: 2-Methylanthracene (50-115%)*

76 %

The reporting limit for this sample was adjusted by a factor of 2 to account for the applicable preparation factor.

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 Project Manager

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 Attention: Diane Suzuki

Client Project ID: E2F010157

Sampled: 05/31/02  
 Received: 06/04/02

Report Number: PLF0033

### METHOD BLANK/QC DATA

## POLYNUCLEAR AROMATIC HYDROCARBONS (EPA 8310)

| Analyte  | Result | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Data Qualifiers |
|--|--------|-----------------|-------|-------------|---------------|------|-------------|-----|-----------|-----------------|
| <b>Batch: P2F1106 Extracted: 06/11/02</b>      |        |                 |       |             |               |      |             |     |           |                 |
| <b>Blank Analyzed: 06/14/02 (P2F1106-BLK1)</b> |        |                 |       |             |               |      |             |     |           |                 |
| Acenaphthene                                   | ND     | 50              | ug/kg |             |               |      |             |     |           |                 |
| Acenaphthylene                                 | ND     | 200             | ug/kg |             |               |      |             |     |           |                 |
| Anthracene                                     | ND     | 2.0             | ug/kg |             |               |      |             |     |           |                 |
| Benz(a)anthracene                              | ND     | 2.0             | ug/kg |             |               |      |             |     |           |                 |
| Benzo(a)pyrene                                 | ND     | 2.0             | ug/kg |             |               |      |             |     |           |                 |
| Benzo(b)fluoranthene                           | ND     | 5.0             | ug/kg |             |               |      |             |     |           |                 |
| Benzo(g,h,i)perylene                           | ND     | 5.0             | ug/kg |             |               |      |             |     |           |                 |
| Benzo(k)fluoranthene                           | ND     | 2.0             | ug/kg |             |               |      |             |     |           |                 |
| Chrysene                                       | ND     | 5.0             | ug/kg |             |               |      |             |     |           |                 |
| Dibenz(a,h)anthracene                          | ND     | 5.0             | ug/kg |             |               |      |             |     |           |                 |
| Fluoranthene                                   | ND     | 5.0             | ug/kg |             |               |      |             |     |           |                 |
| Fluorene                                       | ND     | 5.0             | ug/kg |             |               |      |             |     |           |                 |
| Indeno(1,2,3-cd)pyrene                         | ND     | 5.0             | ug/kg |             |               |      |             |     |           |                 |
| Naphthalene                                    | ND     | 40              | ug/kg |             |               |      |             |     |           |                 |
| Phenanthrene                                   | ND     | 5.0             | ug/kg |             |               |      |             |     |           |                 |
| Pyrene   | ND     | 5.0             | ug/kg |             |               |      |             |     |           |                 |
| Surrogate: 2-Methylnanthracene                 | 99.1   |                 | ug/kg | 100         |               | 99   | 50-115      |     |           |                 |
| <b>LCS Analyzed: 06/14/02 (P2F1106-BS1)</b>    |        |                 |       |             |               |      |             |     |           |                 |
| Acenaphthene                                   | 1730   | 50              | ug/kg | 2000        |               | 86   | 70-115      |     |           |                 |
| Acenaphthylene                                 | 877    | 200             | ug/kg | 1000        |               | 88   | 75-130      |     |           |                 |
| Anthracene                                     | 34.7   | 2.0             | ug/kg | 40.0        |               | 87   | 65-115      |     |           |                 |
| Benz(a)anthracene                              | 101    | 2.0             | ug/kg | 100         |               | 101  | 85-120      |     |           |                 |
| Benzo(a)pyrene                                 | 99.3   | 2.0             | ug/kg | 100         |               | 99   | 50-115      |     |           |                 |
| Benzo(b)fluoranthene                           | 41.1   | 5.0             | ug/kg | 40.0        |               | 103  | 75-125      |     |           |                 |
| Benzo(g,h,i)perylene                           | 171    | 5.0             | ug/kg | 160         |               | 107  | 75-120      |     |           |                 |
| Benzo(k)fluoranthene                           | 37.3   | 2.0             | ug/kg | 40.0        |               | 93   | 85-115      |     |           |                 |
| Chrysene                                       | 107    | 5.0             | ug/kg | 100         |               | 107  | 75-115      |     |           |                 |
| Dibenz(a,h)anthracene                          | 400    | 5.0             | ug/kg | 400         |               | 100  | 75-125      |     |           |                 |
| Fluoranthene                                   | 90.7   | 5.0             | ug/kg | 100         |               | 91   | 75-115      |     |           |                 |
| Fluorene                                       | 178    | 5.0             | ug/kg | 200         |               | 89   | 70-130      |     |           |                 |
| Indeno(1,2,3-cd)pyrene                         | 86.5   | 5.0             | ug/kg | 100         |               | 86   | 80-115      |     |           |                 |
| Naphthalene                                    | 853    | 40              | ug/kg | 1000        |               | 85   | 70-115      |     |           |                 |
| Phenanthrene                                   | 66.5   | 5.0             | ug/kg | 80.0        |               | 83   | 70-115      |     |           |                 |
| Pyrene   | 204    | 5.0             | ug/kg | 200         |               | 102  | 85-120      |     |           |                 |

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 Attention: Diane Suzuki

Client Project ID: E2F010157  
 Report Number: PLF0033

Sampled: 05/31/02  
 Received: 06/04/02

### METHOD BLANK/QC DATA

## POLYNUCLEAR AROMATIC HYDROCARBONS (EPA 8310)

| Analyte  | Result | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Data Qualifiers |
|--|--------|-----------------|-------|-------------|---------------|------|-------------|-----|-----------|-----------------|
| <b>Batch: P2F1106 Extracted: 06/11/02</b>            |        |                 |       |             |               |      |             |     |           |                 |
| <b>LCS Analyzed: 06/14/02 (P2F1106-BS1)</b>          |        |                 |       |             |               |      |             |     |           |                 |
| Surrogate: 2-Methylnaphthalene                       | 103    |                 | ug/kg | 100         |               | 103  | 50-115      |     |           |                 |
| Acenaphthene   | 1930   | 50              | ug/kg | 2000        |               | 96   | 70-115      | 11  | 30        |                 |
| Acenaphthylene                                       | 957    | 200             | ug/kg | 1000        |               | 96   | 75-130      | 9   | 30        |                 |
| Anthracene   | 36.3   | 2.0             | ug/kg | 40.0        |               | 91   | 65-115      | 5   | 30        |                 |
| Benz(a)anthracene                                    | 103    | 2.0             | ug/kg | 100         |               | 103  | 85-120      | 2   | 30        |                 |
| Benzo(a)pyrene                                       | 99.7   | 2.0             | ug/kg | 100         |               | 100  | 50-115      | 0.4 | 30        |                 |
| Benzo(b)fluoranthene                                 | 40.9   | 5.0             | ug/kg | 40.0        |               | 102  | 75-125      | 0.5 | 30        |                 |
| Benzo(g,h,i)perylene                                 | 165    | 5.0             | ug/kg | 160         |               | 103  | 75-120      | 4   | 30        |                 |
| Benzo(k)fluoranthene                                 | 37.5   | 2.0             | ug/kg | 40.0        |               | 94   | 85-115      | 0.5 | 30        |                 |
| Chrysene   | 110    | 5.0             | ug/kg | 100         |               | 110  | 75-115      | 3   | 30        |                 |
| Dibenz(a,h)anthracene                                | 389    | 5.0             | ug/kg | 400         |               | 97   | 75-125      | 3   | 30        |                 |
| Fluoranthene   | 94.1   | 5.0             | ug/kg | 100         |               | 94   | 75-115      | 4   | 30        |                 |
| Fluorene   | 193    | 5.0             | ug/kg | 200         |               | 96   | 70-130      | 8   | 30        |                 |
| Indeno(1,2,3-cd)pyrene                               | 88.4   | 5.0             | ug/kg | 100         |               | 88   | 80-115      | 2   | 30        |                 |
| Naphthalene  | 921    | 40              | ug/kg | 1000        |               | 92   | 70-115      | 8   | 30        |                 |
| Phenanthrene   | 70.0   | 5.0             | ug/kg | 80.0        |               | 88   | 70-115      | 5   | 30        |                 |
| Pyrene   | 211    | 5.0             | ug/kg | 200         |               | 106  | 85-120      | 3   | 30        |                 |
| Surrogate: 2-Methylnaphthalene                       | 106    |                 | ug/kg | 100         |               | 106  | 50-115      |     |           |                 |
| <b>Matrix Spike Analyzed: 06/15/02 (P2F1106-MS1)</b> |        |                 |       |             |               |      |             |     |           |                 |
| Source: PLF0033-03                                   |        |                 |       |             |               |      |             |     |           |                 |
| Acenaphthene   | 3020   | 100             | ug/kg | 4000        | ND            | 76   | 65-115      |     |           |                 |
| Acenaphthylene                                       | 2250   | 400             | ug/kg | 2000        | 620           | 82   | 65-125      |     |           |                 |
| Anthracene   | 56.7   | 4.0             | ug/kg | 80.0        | ND            | 70   | 55-115      |     |           |                 |
| Benz(a)anthracene                                    | 165    | 4.0             | ug/kg | 200         | ND            | 82   | 50-140      |     |           |                 |
| Benzo(a)pyrene                                       | 157    | 4.0             | ug/kg | 200         | ND            | 78   | 50-120      |     |           |                 |
| Benzo(b)fluoranthene                                 | 65.1   | 10              | ug/kg | 80.0        | ND            | 81   | 50-150      |     |           |                 |
| Benzo(g,h,i)perylene                                 | 246    | 10              | ug/kg | 320         | ND            | 77   | 50-155      |     |           |                 |
| Benzo(k)fluoranthene                                 | 58.5   | 4.0             | ug/kg | 80.0        | ND            | 73   | 50-140      |     |           |                 |
| Chrysene   | 185    | 10              | ug/kg | 200         | ND            | 92   | 50-145      |     |           |                 |
| Dibenz(a,h)anthracene                                | 598    | 10              | ug/kg | 800         | ND            | 75   | 50-150      |     |           |                 |
| Fluoranthene   | 143    | 10              | ug/kg | 200         | ND            | 72   | 50-135      |     |           |                 |
| Fluorene   | 284    | 10              | ug/kg | 400         | ND            | 71   | 65-115      |     |           |                 |
| Indeno(1,2,3-cd)pyrene                               | 135    | 10              | ug/kg | 200         | ND            | 68   | 50-140      |     |           |                 |
| Naphthalene  | 1460   | 80              | ug/kg | 2000        | ND            | 73   | 65-115      |     |           |                 |
| Phenanthrene   | 111    | 10              | ug/kg | 160         | ND            | 69   | 50-120      |     |           |                 |

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STL Los Angeles  
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 Attention: Diane Suzuki

Client Project ID: E2F010157

Sampled: 05/31/02  
 Received: 06/04/02

Report Number: PLF0033

### METHOD BLANK/QC DATA

## POLYNUCLEAR AROMATIC HYDROCARBONS (EPA 8310)

| Analyte  | Result | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Data Qualifiers |
|--|--------|-----------------|-------|-------------|---------------|------|-------------|-----|-----------|-----------------|
| <b>Batch: P2F1106 Extracted: 06/11/02</b>          |        |                 |       |             |               |      |             |     |           |                 |
| Matrix Spike Analyzed: 06/15/02 (P2F1106-MS1)      |        |                 |       |             |               |      |             |     |           |                 |
| Pyrene   | 330    | 10              | ug/kg | 400         | ND            | 82   | 55-155      |     |           |                 |
| Surrogate: 2-Methylnanthracene                     | 179    |                 | ug/kg | 200         |               | 90   | 50-115      |     |           |                 |
| Matrix Spike Dup Analyzed: 06/15/02 (P2F1106-MSD1) |        |                 |       |             |               |      |             |     |           |                 |
| Source: PLF0033-03                                 |        |                 |       |             |               |      |             |     |           |                 |
| Acenaphthene                                       | 3300   | 100             | ug/kg | 4000        | ND            | 82   | 65-115      | 9   | 30        |                 |
| Acenaphthylene                                     | 2450   | 400             | ug/kg | 2000        | 620           | 92   | 65-125      | 9   | 30        |                 |
| Anthracene   | 61.8   | 4.0             | ug/kg | 80.0        | ND            | 77   | 55-115      | 9   | 30        |                 |
| Benz(a)anthracene                                  | 174    | 4.0             | ug/kg | 200         | ND            | 87   | 50-140      | 5   | 30        |                 |
| Benzo(a)pyrene                                     | 171    | 4.0             | ug/kg | 200         | ND            | 86   | 50-120      | 9   | 30        |                 |
| Benzo(b)fluoranthene                               | 68.4   | 10              | ug/kg | 80.0        | ND            | 86   | 50-150      | 5   | 30        |                 |
| Benzo(g,h,i)perylene                               | 276    | 10              | ug/kg | 320         | ND            | 86   | 50-155      | 11  | 30        |                 |
| Benzo(k)fluoranthene                               | 64.0   | 4.0             | ug/kg | 80.0        | ND            | 80   | 50-140      | 9   | 30        |                 |
| Chrysene   | 178    | 10              | ug/kg | 200         | ND            | 89   | 50-145      | 4   | 30        |                 |
| Dibenz(a,h)anthracene                              | 654    | 10              | ug/kg | 800         | ND            | 82   | 50-150      | 9   | 30        |                 |
| Fluoranthene                                       | 160    | 10              | ug/kg | 200         | ND            | 80   | 50-135      | 11  | 30        |                 |
| Fluorene   | 305    | 10              | ug/kg | 400         | ND            | 76   | 65-115      | 7   | 30        |                 |
| Indeno(1,2,3-cd)pyrene                             | 149    | 10              | ug/kg | 200         | ND            | 74   | 50-140      | 10  | 30        |                 |
| Naphthalene  | 1540   | 80              | ug/kg | 2000        | ND            | 77   | 65-115      | 5   | 30        |                 |
| Phenanthrene                                       | 121    | 10              | ug/kg | 160         | ND            | 76   | 50-120      | 9   | 30        |                 |
| Pyrene   | 357    | 10              | ug/kg | 400         | ND            | 89   | 55-155      | 8   | 30        |                 |
| Surrogate: 2-Methylnanthracene                     | 182    |                 | ug/kg | 200         |               | 91   | 50-115      |     |           |                 |

### Batch: P2F1317 Extracted: 06/13/02

#### Blank Analyzed: 06/18/02 (P2F1317-BLK1)

|                       |    |     |       |  |  |  |  |  |  |     |
|-----------------------|----|-----|-------|--|--|--|--|--|--|-----|
| Acenaphthene          | ND | 50  | ug/kg |  |  |  |  |  |  |     |
| Acenaphthylene        | ND | 200 | ug/kg |  |  |  |  |  |  |     |
| Anthracene            | ND | 2.0 | ug/kg |  |  |  |  |  |  |     |
| Benz(a)anthracene     | ND | 2.0 | ug/kg |  |  |  |  |  |  |     |
| Benzo(a)pyrene        | ND | 2.0 | ug/kg |  |  |  |  |  |  | C2  |
| Benzo(b)fluoranthene  | ND | 5.0 | ug/kg |  |  |  |  |  |  | C1b |
| Benzo(g,h,i)perylene  | ND | 5.0 | ug/kg |  |  |  |  |  |  | Clf |
| Benzo(k)fluoranthene  | ND | 2.0 | ug/kg |  |  |  |  |  |  |     |
| Chrysene              | ND | 5.0 | ug/kg |  |  |  |  |  |  |     |
| Dibenz(a,h)anthracene | ND | 5.0 | ug/kg |  |  |  |  |  |  | C1d |
| Fluoranthene          | ND | 5.0 | ug/kg |  |  |  |  |  |  |     |
| Fluorene              | ND | 5.0 | ug/kg |  |  |  |  |  |  |     |

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 Attention: Diane Suzuki

Client Project ID: E2F010157  
 Report Number: PLF0033

Sampled: 05/31/02  
 Received: 06/04/02

### METHOD BLANK/QC DATA

## POLYNUCLEAR AROMATIC HYDROCARBONS (EPA 8310)

| Analyte  | Result | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Data Qualifiers |
|--|--------|-----------------|-------|-------------|---------------|------|-------------|-----|-----------|-----------------|
| <b>Batch: P2F1317 Extracted: 06/13/02</b>        |        |                 |       |             |               |      |             |     |           |                 |
| <b>Blank Analyzed: 06/18/02 (P2F1317-BLK1)</b>   |        |                 |       |             |               |      |             |     |           |                 |
| Indeno(1,2,3-cd)pyrene                           | ND     | 5.0             | ug/kg |             |               |      |             |     |           |                 |
| Naphthalene                                      | ND     | 40              | ug/kg |             |               |      |             |     |           |                 |
| Phenanthrene                                     | ND     | 5.0             | ug/kg |             |               |      |             |     |           |                 |
| Pyrene   | ND     | 5.0             | ug/kg |             |               |      |             |     |           |                 |
| Surrogate: 2-Methylnaphthalene                   | 93.9   |                 | ug/kg | 100         |               | 94   | 50-115      |     |           |                 |
| <b>LCS Analyzed: 06/19/02 (P2F1317-BS1)</b>      |        |                 |       |             |               |      |             |     |           |                 |
| Acenaphthene                                     | 1630   | 50              | ug/kg | 2000        |               | 82   | 70-115      |     |           |                 |
| Acenaphthylene                                   | 782    | 200             | ug/kg | 1000        |               | 78   | 75-130      |     |           |                 |
| Anthracene                                       | 30.5   | 2.0             | ug/kg | 40.0        |               | 76   | 65-115      |     |           |                 |
| Benz(a)anthracene                                | 88.3   | 2.0             | ug/kg | 100         |               | 88   | 85-120      |     |           |                 |
| Benzo(a)pyrene                                   | 72.8   | 2.0             | ug/kg | 100         |               | 73   | 50-115      |     |           |                 |
| Benzo(b)fluoranthene                             | 33.7   | 5.0             | ug/kg | 40.0        |               | 84   | 75-125      |     |           |                 |
| Benzo(g,h,i)perylene                             | 144    | 5.0             | ug/kg | 160         |               | 90   | 75-120      |     |           |                 |
| Benzo(k)fluoranthene                             | 33.9   | 2.0             | ug/kg | 40.0        |               | 85   | 85-115      |     |           |                 |
| Chrysene   | 81.0   | 5.0             | ug/kg | 100         |               | 81   | 75-115      |     |           | C1a             |
| Dibenz(a,h)anthracene                            | 348    | 5.0             | ug/kg | 400         |               | 87   | 75-125      |     |           |                 |
| Fluoranthene                                     | 78.1   | 5.0             | ug/kg | 100         |               | 78   | 75-115      |     |           |                 |
| Fluorene   | 160    | 5.0             | ug/kg | 200         |               | 80   | 70-130      |     |           |                 |
| Indeno(1,2,3-cd)pyrene                           | 84.9   | 5.0             | ug/kg | 100         |               | 85   | 80-115      |     |           |                 |
| Naphthalene                                      | 760    | 40              | ug/kg | 1000        |               | 76   | 70-115      |     |           |                 |
| Phenanthrene                                     | 59.3   | 5.0             | ug/kg | 80.0        |               | 74   | 70-115      |     |           |                 |
| Pyrene   | 183    | 5.0             | ug/kg | 200         |               | 92   | 85-120      |     |           |                 |
| Surrogate: 2-Methylnaphthalene                   | 88.0   |                 | ug/kg | 100         |               | 88   | 50-115      |     |           |                 |
| <b>LCS Dup Analyzed: 06/18/02 (P2F1317-BSD1)</b> |        |                 |       |             |               |      |             |     |           |                 |
| Acenaphthene                                     | 1710   | 50              | ug/kg | 2000        |               | 86   | 70-115      | 5   | 30        |                 |
| Acenaphthylene                                   | 843    | 200             | ug/kg | 1000        |               | 84   | 75-130      | 8   | 30        |                 |
| Anthracene                                       | 32.2   | 2.0             | ug/kg | 40.0        |               | 80   | 65-115      | 5   | 30        |                 |
| Benz(a)anthracene                                | 90.5   | 2.0             | ug/kg | 100         |               | 90   | 85-120      | 2   | 30        |                 |
| Benzo(a)pyrene                                   | 67.3   | 2.0             | ug/kg | 100         |               | 67   | 50-115      | 8   | 30        | C2              |
| Benzo(b)fluoranthene                             | 35.3   | 5.0             | ug/kg | 40.0        |               | 88   | 75-125      | 5   | 30        | C1b             |
| Benzo(g,h,i)perylene                             | 139    | 5.0             | ug/kg | 160         |               | 87   | 75-120      | 4   | 30        | C1f             |
| Benzo(k)fluoranthene                             | 35.2   | 2.0             | ug/kg | 40.0        |               | 88   | 85-115      | 4   | 30        |                 |
| Chrysene   | 81.3   | 5.0             | ug/kg | 100         |               | 81   | 75-115      | 0.4 | 30        |                 |
| Dibenz(a,h)anthracene                            | 352    | 5.0             | ug/kg | 400         |               | 88   | 75-125      | 1   | 30        | C1d             |
| Fluoranthene                                     | 80.0   | 5.0             | ug/kg | 100         |               | 80   | 75-115      | 2   | 30        |                 |

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Client Project ID: E2F010157

Sampled: 05/31/02

Report Number: PLF0033

Received: 06/04/02

### METHOD BLANK/QC DATA

## POLYNUCLEAR AROMATIC HYDROCARBONS (EPA 8310)

| Analyte   | Result | Reporting Limit | Units | Spike Level | Source Result | %REC   | %REC Limits | RPD | RPD Limit | Data Qualifiers |
|---|--------|-----------------|-------|-------------|---------------|--------|-------------|-----|-----------|-----------------|
| <b>Batch: P2F1317 Extracted: 06/13/02</b>                 |        |                 |       |             |               |        |             |     |           |                 |
| <b>LCS Dup Analyzed: 06/18/02 (P2F1317-BSD1)</b>          |        |                 |       |             |               |        |             |     |           |                 |
| Fluorene  | 172    | 5.0             | ug/kg | 200         | 86            | 70-130 | 7           | 30  |           |                 |
| Indeno(1,2,3-cd)pyrene                                    | 86.3   | 5.0             | ug/kg | 100         | 86            | 80-115 | 2           | 30  |           |                 |
| Naphthalene   | 801    | 40              | ug/kg | 1000        | 80            | 70-115 | 5           | 30  |           |                 |
| Phenanthrene  | 66.1   | 5.0             | ug/kg | 80.0        | 83            | 70-115 | 11          | 30  |           |                 |
| Pyrene  | 187    | 5.0             | ug/kg | 200         | 94            | 85-120 | 2           | 30  |           |                 |
| <i>Surrogate: 2-Methylnanthracene</i>                     | 87.2   |                 | ug/kg | 100         | 87            | 50-115 |             |     |           |                 |
| <b>Matrix Spike Analyzed: 06/18/02 (P2F1317-MS1)</b>      |        |                 |       |             |               |        |             |     |           |                 |
| Source: PLF0288-04  |        |                 |       |             |               |        |             |     |           |                 |
| Acenaphthene  | 1790   | 50              | ug/kg | 2000        | ND            | 90     | 65-115      |     |           |                 |
| Acenaphthylene  | 956    | 200             | ug/kg | 1000        | ND            | 85     | 65-125      |     |           |                 |
| Anthracene  | 31.8   | 2.0             | ug/kg | 40.0        | ND            | 79     | 55-115      |     |           |                 |
| Benz(a)anthracene   | 86.1   | 2.0             | ug/kg | 100         | ND            | 86     | 50-140      |     |           |                 |
| Benzo(a)pyrene  | 68.6   | 2.0             | ug/kg | 100         | ND            | 69     | 50-120      |     |           | C2              |
| Benzo(b)fluoranthene                                      | 34.3   | 5.0             | ug/kg | 40.0        | ND            | 83     | 50-150      |     |           | C1b             |
| Benzo(g,h,i)perylene                                      | 129    | 5.0             | ug/kg | 160         | ND            | 81     | 50-155      |     |           | C1f             |
| Benzo(k)fluoranthene                                      | 32.7   | 2.0             | ug/kg | 40.0        | ND            | 82     | 50-140      |     |           |                 |
| Chrysene  | 77.3   | 5.0             | ug/kg | 100         | ND            | 77     | 50-145      |     |           |                 |
| Dibenz(a,h)anthracene                                     | 340    | 5.0             | ug/kg | 400         | ND            | 85     | 50-150      |     |           | C1d             |
| Fluoranthene  | 78.2   | 5.0             | ug/kg | 100         | ND            | 78     | 50-135      |     |           |                 |
| Fluorene  | 169    | 5.0             | ug/kg | 200         | ND            | 84     | 65-115      |     |           |                 |
| Indeno(1,2,3-cd)pyrene                                    | 78.7   | 5.0             | ug/kg | 100         | ND            | 79     | 50-140      |     |           |                 |
| Naphthalene   | 808    | 40              | ug/kg | 1000        | ND            | 81     | 65-115      |     |           |                 |
| Phenanthrene  | 59.3   | 5.0             | ug/kg | 80.0        | ND            | 74     | 50-120      |     |           |                 |
| Pyrene  | 184    | 5.0             | ug/kg | 200         | ND            | 92     | 55-155      |     |           |                 |
| <i>Surrogate: 2-Methylnanthracene</i>                     | 87.8   |                 | ug/kg | 100         |               | 88     | 50-115      |     |           |                 |
| <b>Matrix Spike Dup Analyzed: 06/18/02 (P2F1317-MSD1)</b> |        |                 |       |             |               |        |             |     |           |                 |
| Source: PLF0288-04  |        |                 |       |             |               |        |             |     |           |                 |
| Acenaphthene  | 1710   | 50              | ug/kg | 2000        | ND            | 86     | 65-115      | 5   | 30        |                 |
| Acenaphthylene  | 928    | 200             | ug/kg | 1000        | ND            | 82     | 65-125      | 3   | 30        |                 |
| Anthracene  | 31.6   | 2.0             | ug/kg | 40.0        | ND            | 78     | 55-115      | 0.6 | 30        |                 |
| Benz(a)anthracene   | 89.9   | 2.0             | ug/kg | 100         | ND            | 90     | 50-140      | 4   | 30        |                 |
| Benzo(a)pyrene  | 73.2   | 2.0             | ug/kg | 100         | ND            | 73     | 50-120      | 6   | 30        | C2              |
| Benzo(b)fluoranthene                                      | 35.7   | 5.0             | ug/kg | 40.0        | ND            | 87     | 50-150      | 4   | 30        | C1b             |
| Benzo(g,h,i)perylene                                      | 137    | 5.0             | ug/kg | 160         | ND            | 86     | 50-155      | 6   | 30        | C1f             |
| Benzo(k)fluoranthene                                      | 34.3   | 2.0             | ug/kg | 40.0        | ND            | 86     | 50-140      | 5   | 30        |                 |
| Chrysene  | 81.5   | 5.0             | ug/kg | 100         | ND            | 82     | 50-145      | 5   | 30        |                 |
| Dibenz(a,h)anthracene                                     | 353    | 5.0             | ug/kg | 400         | ND            | 88     | 50-150      | 4   | 30        | C1d             |



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Client Project ID: E2F010157

Sampled: 05/31/02  
Received: 06/04/02

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### METHOD BLANK/OC DATA

## POLYNUCLEAR AROMATIC HYDROCARBONS (EPA 8310)

| Analyte   | Result | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Data Qualifiers |
|---|--------|-----------------|-------|-------------|---------------|------|-------------|-----|-----------|-----------------|
| <b>Batch: P2F1317 Extracted: 06/13/02</b>                 |        |                 |       |             |               |      |             |     |           |                 |
| <b>Matrix Spike Dup Analyzed: 06/18/02 (P2F1317-MSD1)</b> |        |                 |       |             |               |      |             |     |           |                 |
| Fluoranthene  | 78.1   | 5.0             | ug/kg | 100         | ND            | 78   | 50-135      | 0.1 | 30        |                 |
| Fluorene  | 167    | 5.0             | ug/kg | 200         | ND            | 84   | 65-115      | 1   | 30        |                 |
| Indeno(1,2,3-cd)pyrene                                    | 83.8   | 5.0             | ug/kg | 100         | ND            | 84   | 50-140      | 6   | 30        |                 |
| Naphthalene   | 817    | 40              | ug/kg | 1000        | ND            | 82   | 65-115      | 1   | 30        |                 |
| Phenanthrene  | 61.7   | 5.0             | ug/kg | 80.0        | ND            | 77   | 50-120      | 4   | 30        |                 |
| Pyrene  | 182    | 5.0             | ug/kg | 200         | ND            | 91   | 55-155      | 1   | 30        |                 |
| Surrogate: 2-Methylnanthracene                            | 89.2   |                 | ug/kg | 100         |               | 89   | 50-115      |     |           |                 |

Nicole Beck For Debbie Fuller  
Project Manager

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STL Los Angeles  
1721 S Grand Avenue  
Santa Ana, CA 92706  
Attention: Diane Suzuki

Client Project ID: E2F010157  
Report Number: PLF0033

Sampled: 05/31/02  
Received: 06/04/02

### METHOD BLANK/OC DATA

## DATA QUALIFIERS AND DEFINITIONS

- C1** Calibration Verification recovery was above the method control limit for this analyte, however the average % difference for all analytes met method criteria. See Calibration Summary form. 117.07
- C2** Calibration Verification recovery was below the method control limit for this analyte, however the average % difference for all analytes met method criteria. See Calibration Summary form 79.60
- ND** Analyte NOT DETECTED at or above the reporting limit
- NR** Not reported.
- RPD** Relative Percent Difference

Nicole Beck For Debbie Fuller  
Project Manager

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**Appendix E**  
**Well Decommissioning Report**

## WELL DECOMMISSIONING REPORT

Well No.  
WCC-3D

**PROJECT** Boeing Realty Corporation Former C-6 Facility  
**LOCATION** Los Angeles, California  
**CLIENT** Boeing Realty Corporation  
**CONTRACTOR** West Hazmat Drilling

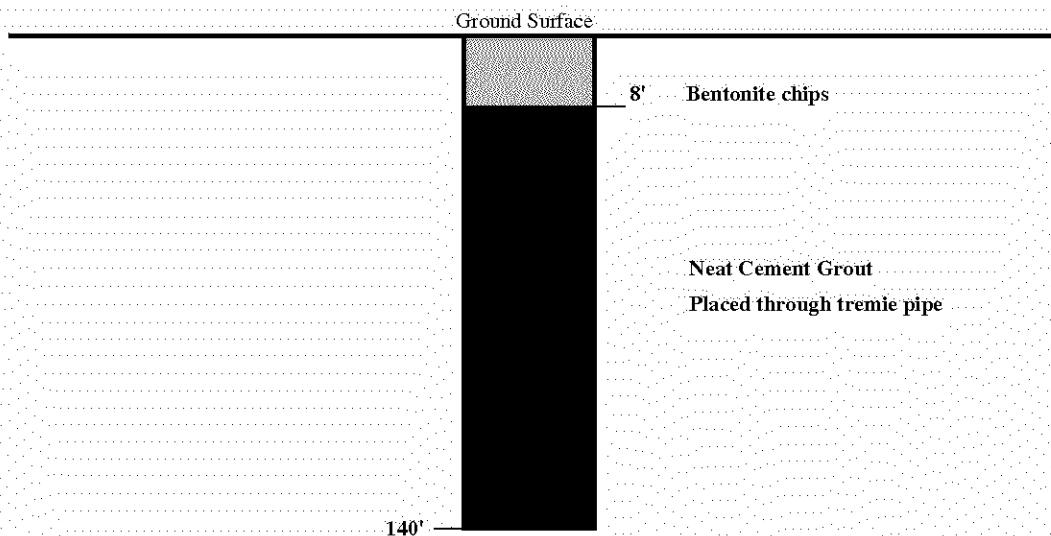
**H&A FILE NO.**  
**PROJECT MGR.** S.P. Zachary  
**FIELD REP.** H. Hernandez  
**REMOVAL DATE** 5/31/2002

**Well Designation** WCC-3D  
**Well Diameter** 4-inch I.D. PVC  
**Decommissioning Technique** Over Drill, Tremie Grout  
**Depth to Groundwater** 64.16 feet  
**Total Depth of Well** 141 feet

|              | Cement<br>(Lbs. - Bags*)  | Additive<br>(Lbs. - Gals.) | Water<br>(Gals.) | Final Quantity<br>(Gals.) |
|--------------|---------------------------|----------------------------|------------------|---------------------------|
| Type         | Portland Cement<br>3-bags | Hydrogel 1.5<br>bags       | 40 gals          | 50 gals                   |
| Manufacturer | Colton<br>Manufacturing   | Wyo-Ben                    |                  |                           |
| Quantity     | 43 bags                   | 21.5 bags                  | 572 gals         | 720 gals                  |

\*1 Bag = 94 Lbs.

Sketch:



**COMMENTS:** The destruction was performed by pulling the PVC well casing and screen, over-drilling with 11 1/4-inch O.D. hollow-stem augers, and grouting through a 1 1/2-inch tremie pipe placed on the bottom of the borehole through the augers. The grout was allowed to settle over night and the borehole was topped off to 5-feet bgs with bentonite chips.